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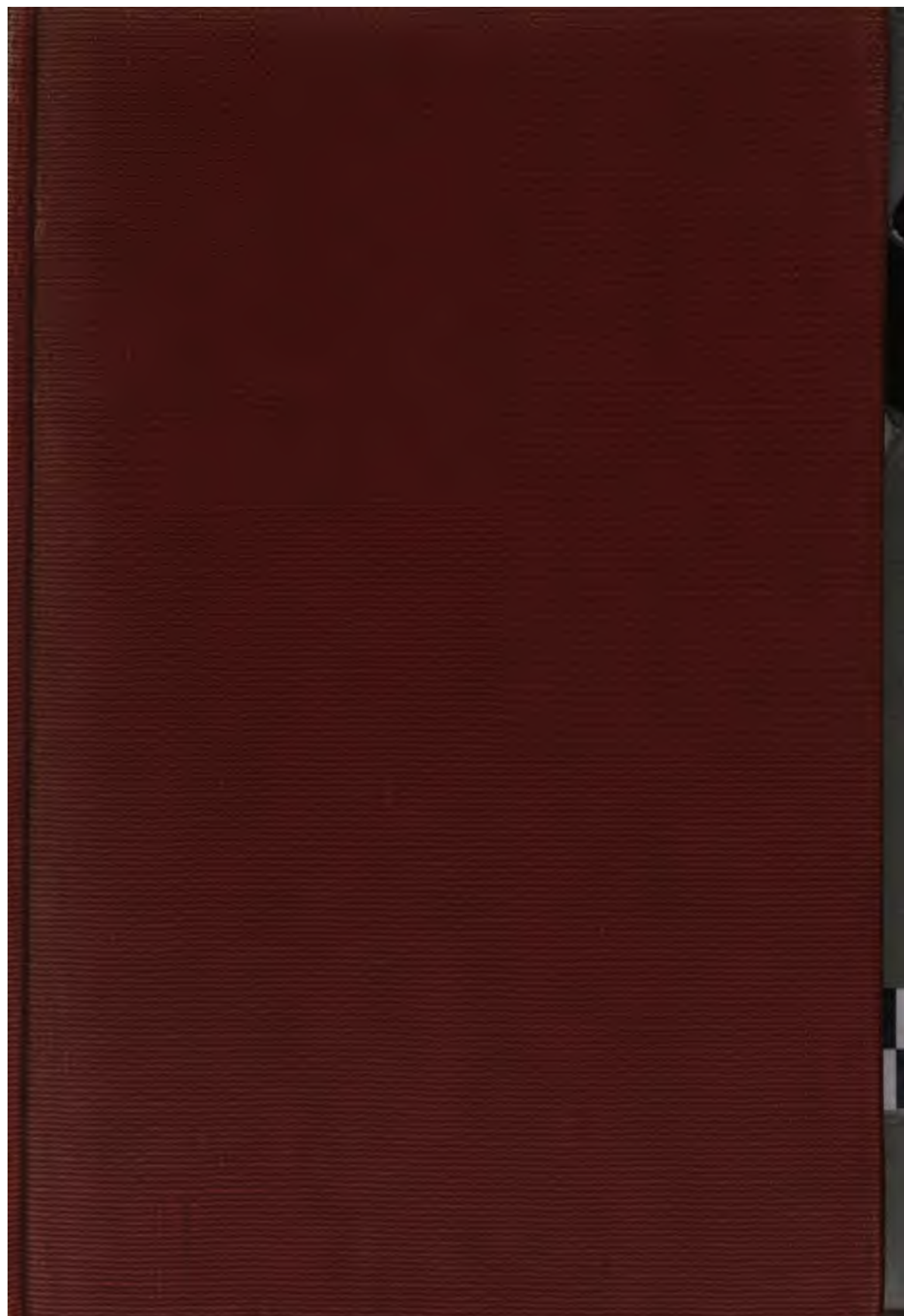
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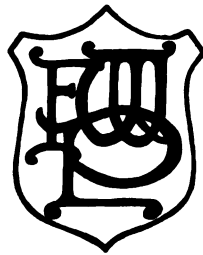
LELAND STANFORD JUNIOR UNIVERSITY





FRANCIS W. PARKER SCHOOL YEAR BOOK

THE MORNING EXERCISE
AS A
SOCIALIZING INFLUENCE



VOLUME II

JUNE, 1913

Published annually by the Faculty of the Francis W. Parker School, Chicago
PRICE, THIRTY-FIVE CENTS

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Press of
Francis W. Parker School
330 Webster Avenue
Chicago

PREFACE

As tentatively announced in our first YEAR BOOK, the subject of the second YEAR BOOK is "The Morning Exercise as a *Socializing Influence* in the School."

There has been a morning exercise every day during the twelve years of the existence of the Francis W. Parker School, and although stenographic notes have been made of many of these exercises, it has proved difficult to select from this mass of material the best examples for publication. We have confined the choice to those which have seemed typical in subject-matter and plan of presentation and have included only those in which the idea expressed has seemed adaptable for use in any school trying such an experiment. A large portion of the book consists of verbatim reports of exercises, with only explanatory notes by the teachers.

The faculty as a whole has shared in making the book, although each of its members could not be represented by an exercise. Committees and individuals have submitted results to the entire faculty for approval, so that, while there have been at times disagreements upon certain points, the outcome given to our readers represents the choice or agreement of a majority of the teaching force of the School.

We are indebted to Miss Martha Fleming of the School of Education, University of Chicago, for the article on the "Purposes and Values of the Morning Exercise." Miss Fleming was associated with Colonel Parker in the Cook County and Chicago Normal School, and no one is better qualified than she to speak with authority upon the subject of the morning exercise.



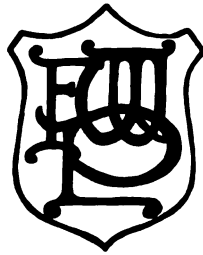
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CONTENTS

	Page
The History of the Morning Exercise.....	7
Flora J. Cooke	
Purposes and Values of the Morning Exercise.....	11
Martha Fleming	
Exercises Showing Types of Preparation	
Preparation of an Exercise on William Blake (Fourth Grade)...	19
Jennie Hall	
The Making of a Play in a Primary Grade.....	28
Jennie Hall	
Preparation of an Exercise on Historical Methods in Arith- metic (Fifth Grade)	39
Herman T. Lukens	
Preparation of an Exercise on the Great Ice Sheet (Fifth Grade). 43	
Herman T. Lukens	
Preparation of an Exercise on the Age of Elizabeth (Eighth Grade)	49
Irene I. Cleaves	
Preparation of an Exercise on Cicero (High School).....	55
Lura M. Thomas	
Exercises Reported Verbatim	
Play Houses and Primitive Homes (First Grade).....	67
Hattie A. Walker	
A Nature Excursion (Fourth Grade).....	75
Jennie Hall	
A Study of Bridges (Fifth Grade).....	80
Leonard W. Wahlstrom	
The Chemistry of Water (High School).....	84
Raymond W. Osborne	
A Series of Exercises on Illumination (Third Grade through High School)	90
Henry T. Mortensen and Pearl B. Carley	
A Series of Exercises on Pottery (Entire School).....	100
Helen Putnam	
Exercises Emphasizing School Unity and School Policies	
Opening Day of School.....	113
Commencement Day	116
Memorial Day	120
Town Meetings	124
Flora J. Cooke	

CONTENTS

Exercises for Special Days	Page
The Significance of Special Days.....	131
Helen Goodrich	
Christmas	
"Where Love Is." Adapted from Tolstoy (Eighth Grade) ..	134
Irene I. Cleaves	
The Santa Claus Party (Primary, Eighth Grade, High School) ..	138
Grace M. Webster	
The Christmas Services.....	141
Helen Goodrich	
The Nativity Story (First Grade).....	144
Hattie A. Walker	
Thanksgiving	
Introduction	149
Selected Programs of Exercises.....	149
Three Thanksgiving Days: Greek, Hebrew and American.....	153
Elsa Miller	
Patriotic Exercises: Washington's and Lincoln's Birthdays.....	164
John Merrill	
Other Types of Morning Exercises	
Exercises by Outside Speakers.....	169
Henry T. Mortensen	
Group Exercises	171
Flora J. Cooke	
Story Telling Exercises.....	173
Irene I. Cleaves and Katherine Clements	
Poetry Exercises	176
Jennie Hall	
Recitals	181
Helen Goodrich	
A Classified List of Typical Morning Exercises.....	189
James F. Mills, Pearl B. Carley, Nina Leubrie	
A Suggestive List of Marches.....	198
Charles M. Kinney	

NAMES OF TEACHERS, 1912-1913

Every teacher shared in the planning, in the discussion, and in the committee work which the editing of the YEAR BOOK entailed.

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JAMES F. MILLIS, Associate in Administration

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JANE LARRABEE		
GRACE KEE		
HATTIE A. WALKER		First Grade
BERTHA N. ENOCH		Second Grade
PEARL BACKUS CARLEY		Third Grade
JENNIE HALL		Fourth Grade
HERMAN T. LUKENS		Fifth Grade
NINA LEUBRIE		Sixth Grade
ELSA MILLER		Seventh Grade
IRENE I. CLEAVES		Eighth Grade
LURA M. THOMAS		Ninth and Tenth Grades
Latin and History		
ARTHUR DETMERS		Eleventh Grade
English and History		
NEALE S. CARLEY		Twelfth Grade
Latin and Mathematics		
JOHN MERRILL		Dramatic Expression
KATHARINE TAYLOR		English
ARTHUR G. MERRILL	}	German
THEA J. SCHERZ		
ALICE BRUGNOT	}	French
JESSIE FOSTER BARNES		
FLORENCE LUCAS		
JAMES F. MILLIS	}	Mathematics
PERRY DUNLAP SMITH		
RAYMOND W. OSBORNE		Physics and Chemistry
HENRY T. MORTENSEN		Natural Science and Geography
JOSEPHINE FORSYTHE LEACH		Geography
GRACE H. WEBSTER		Domestic Science
HELEN GOODRICH	}	Music
CHARLES M. KINNEY		
JULIA MARY CANFIELD		
FRANCES MUSSELMAN	}	Physical Training
JOSEPH S. WRIGHT		
KATHERINE CLEMENTS		Art
LEONARD W. WAHLSTROM		Manual Training
GRACE K. DEWEY		Metal
HELEN PUTNAM		Clay Modeling
MARY B. BRADLEY		Special Teacher

THE HISTORY OF THE MORNING EXERCISE

Origin in Cook County Normal School

The "Morning Exercise" was the name given thirty years ago by Colonel Parker to the daily assembly in the Cook County Normal School. This meeting was different from the usual chapel exercise, in that it was fundamentally social in purpose. It was the active, unifying influence in the community. Every morning, at the ringing of the bell, all the eight hundred members of the school, the kindergarten and grades, the normal students and the faculty, filed to their assigned seats in the dingy old gymnasium. Everyone had his place, every member of the faculty a position on the platform with Colonel Parker—no lagging or absences were permitted. The arrangement was necessarily stiff and inflexible, and the exercise formal and carefully prepared, and, because the room was very large, the children had to be drilled beforehand to make their voices fill the hall. Yet all these deadening influences could not kill the quickening spirit which pervaded this gathering. The opening hymn was for all; everyone was expected to know it and sing it. The reading was for everyone, something full of inspiration, often a chapter from the Bible, or a beautiful inspiring bit of poetry. The exercise which followed was short—never more than twenty minutes—and usually it was the outcome of class-room work in literature, history, or nature study, or in celebration of some festival day or historical event. Every class in the school was responsible for a certain number of morning exercises a year, and these were assigned at least a month in advance. Each person, big or little, taking part in the exercise knew that he was expected to make the most distant listener hear and understand what he was saying, and usually, controlled thinking and clear enunciation was the result. The outcome justified Colonel Parker's belief that a genuine social demand, when understood and appreciated, will overcome great obstacles and produce genuine self-expression. And those of us who for years were privileged to be a part of this daily gathering think of it with a warm thrill of enthusiasm. We do not remember definitely much that we learned there, but the singing together, the habit of contributing our small best to the common

good was a soul-expanding and heart-warming process, which is the very essence of social education. Such was the morning exercise in the Cook County Normal School,—a thing characteristic and inspiring.

The Morning Exercise in the Francis W. Parker School

The following quotation is taken from a report of a Faculty committee, and covers the history of the morning exercise in the Francis W. Parker School from its origin in 1901 to the year 1906.

"When the Francis W. Parker School was founded, its teachers brought from the old Normal School not only a veneration for the morning exercise, but so strong a habit of having it that it was as essential to the idea of a school as was a curriculum. And we found our new pupils willing co-operators. In this little school of perhaps a hundred and fifty pupils, the morning exercise was at first a crude thing, but a pleasant one, a family meeting. But after three years, we awoke to find that with the increasing numbers, slowly and unaccountably the attitude had changed. Were not many children unwilling to appear before the School? Was not a part of the audience often inattentive? Did there not occasionally seem to be a critical attitude among the listeners? Did it not sometimes appear that an exercise did not ring true with genuine social action on the side of the participants? And yet, our morning exercise still seemed the most precious part of our program. But, feeling that we were on a dangerous road, we began earnestly to consider the question. We needed, both teachers and children, to get back to an understanding of first principles. These principles were canvassed in faculty meetings, and then the committee submitted them to the pupils for discussion at a town meeting. (See report of Town Meeting, Oct., 1905.) From that meeting the teachers learned that the morning exercise, despite mistakes, was almost unanimously considered the pleasantest and most valuable part of the program, a precious thing, worth almost any sacrifice. The discussion was kept to constructive suggestion rather than criticism. And under all these suggestions there was manifested a desire for less formality, for a return from the difficult thing that we had altogether helped to produce to the simple thing natural to the conditions. At the end of this meeting, the children elected from among themselves a committee to act with a like committee from the faculty in following out suggestions already made in this meeting, and to plan further changes. As the result of the work of these committees, the following changes have been made:

"Mornings are no longer assigned to teachers. Any person in the School, teacher or pupil, who wishes to give an exercise applies for time to the committee. Thus there is avoided the strain resulting from a division being forced to give a morning exercise whether the work has rounded itself to completion or not. Moreover, the feeling that it is rather a privilege than a duty to help in an exercise is emphasized. Plans for disposing of the unclaimed mornings have been suggested, but nothing has been adopted,

because there is no present need, since all the exercises for two months ahead are taken.

"The committee strongly advise that the prepared part of every morning exercise close five minutes before the end of the period, in order that the audience may ask questions or add contributions. When possible, the exercise should be planned with the purpose of encouraging such action on the part of the audience. It is usually of no effect to say: 'Has anyone anything to add?' 'Are there any questions?' The exercise itself must start new mental action, and then must give reason for expression. The pupils giving the exercise have sometimes asked help from the audience on questions which they found difficult. One phase of the subject upon which the class is not fully prepared may be thrown open to the audience for discussion. As often as possible, a theme of broad general interest is chosen for presentation, rather than one of limited appeal. To encourage general participation in the exercise, the committee posts every morning the topic of the succeeding morning.

"The newly interested audience, the eager participants, the free discussion, the general co-operation in making the morning exercise period a valuable and pleasant one makes us all feel that at last our exercises have taken the right trend—toward informal expression—and that our great task is to guard them from becoming formalized."

There is little to add to this report. New dangers have arisen, new faults have developed, yet there has been through these last years steady improvement, and our faith in the morning exercise has never wavered. Each year there have been several faculty meetings, in which the teachers of the School have striven with open minds to examine the children's attitude and response in the gatherings. Indeed, the morning exercise may be called the pulse of the School, registering unfailingly our social condition and welfare. Are we over-critical, elaborate, and pedantic? We meet the fact face to face in the exercise, in the children's unwillingness to express themselves. Are we willing to be simple, genuine, growing in beauty, and strength, patiently and sympathetically appreciating the efforts of the least as well as the most gifted ones? We are rewarded in the spirit which is reflected immediately in the renewed enthusiasm and eager attention of children and teachers.

During the last year the exercises have been particularly delightful and satisfactory in form and spirit. Perhaps much of the improvement is due to the persistent dragging in of reluctant ones, to our insistence that every pupil shall feel responsible for the success of these daily meetings. There has been a greater number of high-school exercises than ever before; there have been many more exer-

cises of great simplicity; there has been continually a surplus of exercises ready for use. But whatever the cause, surely there has been a more obvious joy in giving and listening, and a much greater freedom from constraint in both speakers and audience during this year than ever before. Therefore from our own experience as a faculty, despite struggles and mistakes and discouragements, we believe that in describing our morning exercises we are offering to our readers our best and richest experience; that we are pointing to the best training and practice which our pupils have received in applying those principles of Social Education which were given in detail in the Introduction to Volume I of the YEAR BOOK.



PURPOSES AND VALUES OF THE MORNING EXERCISE

If, as most of us concede, the school of today is a social organization in itself, reaching out and touching other life to which it is closely related at every possible point, and so making its own life fuller and richer, then it would seem that all things tending to unify that organization and to make each individual member of it feel his relation to the whole and his responsibility to the whole, are vital to the life of that organization. Whatever will put the child into possession of himself and his material and establish the habit of using both of these freely with understanding and taste for the profit and pleasure of the community must make for the adaptability and power necessary to meet the changed conditions which the larger life of the world and the future are like to lay upon him.

The school is a place where we live together. A large portion of every day is spent there, and the interests of both teacher and children center about it quite as strongly as about the home. We are one family, and it is essential to our unity, harmony, and success, that we have a time and place for coming together. The table and the morning and evening prayer serve this purpose in the family. In the school each grade is isolated by the necessities of the case; each is about its own work. The morning exercise is a common meeting-ground; it is the family altar of the school to which each brings his offerings—the fruits of his observations and studies, or the music, literature, and art that delight him; a place where all co-operate for the pleasure and well-being of the whole; where all contribute to and share the intellectual and spiritual life of the whole; where all bring their best and choicest experiences in the most attractive form at their command.

The morning exercise is one means of impressing upon the children the unity of the whole school and of counteracting some of the undesirable effects of the separation into grades. This community interest is usually a restraint upon individual selfishness. Each child learns that the interest and the happiness of the whole is his special concern, his individual responsibility, that he is a citizen of the com-

munity, endowed not only with the rights but also the duties of citizenship.

This meeting is a kind of substitute for the old-fashioned district school in which intercourse was not limited to the playground or the recess period, but in which everybody knew everybody else, what he was doing and trying to do; in which the little children learned more from contact with the older children and from listening to their recitations than from their own formal lessons; and in which the older ones got that real insight into the interests of the little children, that under favorable influence is apt to develop a sympathy which unconsciously expresses itself in helpful protecting action.

At these meetings all the children meet all the teachers, and child and teacher come in contact with the personality, life, and interests of other children, and with the ideals and work of other teachers and other departments. Here the special teacher learns something of the various interests of the children and so is trained into a respect and sympathy for the work of other teachers and a recognition of the legitimate office of his own work in education, for each teacher must have a sense of the unity of experience and the definite relation of each branch to that unity if he would have a criterion by which to judge or decide about any one study.

The conditions surrounding these exercises are ideal for cultivating powers of expression—an audience and a child with something to tell. They are of untold educative value, because they demand and give opportunity for a great amount and a great variety of expression, and represent an intense effort to adapt means to a definite end. The value of any intellectual product, the status of the mental life of each child, is clearly set forth by his efforts at self-expression. It is the one means by which he studies, defines, tests, and measures his own impressions and conceptions; the effort to make himself understood by others clarifies his thought and gives added skill in the various forms of expression. He plans, he speaks, he acts for the pleasure and enlightenment of other people; he says and does something that he has reason to believe they will like to hear or see; he is expressing himself with reference to others whom he wishes to make understand him; he feels the influence of others; he feels their power, and they feel his, and unconsciously he rises to a higher consciousness of himself and his responsibilities. Children accustomed from childhood to an audience learn to think and speak upon their feet so people can hear

and understand. It is the habit of meeting an audience *every day from the beginning* that tells, that gives power, skill and self-possession. The majority of children trained in this way never experience the agony of self-consciousness that an audience means to those educated to self-repression instead of self-expression.

There is an innate desire in the heart of the human being to do things in company with his fellows. The lowest savages have their feasts, dances, and processions. Religion still has its feast days and its ceremonies. We still have our festivals, our parades, and celebrations. The morning and special-day exercises give opportunity for satisfying the children's love of pageantry, and shaping the product into beauty of form, color, and movement. The orderly meeting every morning is also a dignified and appropriate place for the presentation of the little children's dramatic plays, as well as for the more developed drama of the upper grades. The older children make a strong demand for dramatic expression of some kind—plays, debates, dramatic poetry. They are shy of expressing themselves directly, but they will pour out all their emotional life through dramatic poetry and drama. It seems almost a moral necessity that they have this outlet. It satisfies the social instinct, the love of competition; it stirs the imagination, leads to vivid mental action and is a training in effective speech and in control of the whole body for the purpose of expression.

Music has always been recognized as a great unifying social influence. People who sing together are for the time being moved by one impulse and one thought. It is the one art, if we except the dance, through which the spirit of the whole can be expressed in a single result. These daily exercises give opportunity for the entire school to live together for a few moments every day in this most intense spiritual way. Indeed, coming together is a necessity for musical training, and the exercises become a compelling motive for the study and preparation of the music required by them. At this time the children may also hear interpreted beautiful music which is yet beyond their own skill, and thus learn to listen and to hear with that intelligence which is an essential part of musical training.

These exercises also provide the easiest, simplest, most natural and effective way of bringing the children each day into contact with a choice bit of literature, embodying the central idea of the exercise—a fairy tale, or some world-story, well written and artistically ar-

ranged, a bit of romance or humor, a stirring lyric or an inspiring scene from one of the great dramas. Children are sensitive to rhythm, tone-quality, and to large emotional content, and if the great literature is read to them, simply interpreted, it can be left to work its own way unconsciously into character. One good thing every day means an accumulation of the world's beautiful thoughts. We cannot measure the influence of this immediately and accurately as we can that of more material things, the ability to read, to add or subtract; but we see the pleasure it gives in the present, and many of us can testify to the joy that early contact with great literature has brought into our own lives. The children understand but dimly; they feel rather than understand; but even you and I understand only in part, each according to his own measure.

Some of the best things appropriate to the children may be learned and recited by them when the subject and the occasion demand it. I need not speak of the enrichment of the vocabulary, of the training into effectiveness and beauty of speech, of the freedom of body, or of the joys of expression, that result from such study and recitation. Let me rather emphasize the opening of the eyes, the awakening of the soul to the beauties that often lie unnoticed all about, until some bit of literature, some touch of art reveals them. Some of us get at nature in this way. She hides the beauty of her face from us, until some other hand, moved by a soul with deeper insight, wider sympathies, and the gift of poetry, lifts the veil.

The exercises are necessarily short. This makes it imperative that the children under the direction and co-operation of the teacher, plan and organize something that is in itself a unit, that has reasonable proportion and harmony, that is appropriate to the time and place and within their possibilities of expression. This gives purpose and steadiness to the result; resources are brought under control of the will, the expression tends to become orderly, careful, and accurate. Each child becomes a cause of things, a moving force, a power that makes things happen.

The children make their preparation to do their part, whatever it may be, in an earnest, sincere way, and show sympathy and comprehension in their choice of subject-matter and in the manner of its presentation. A grade or group of children will work together for this common end without thought of self, absorbed in the subject and its expression. They will bring all the resources of the School

and even the home to help them—parents, teachers, librarians, museum, art, literature and music—and will select unerringly whatever mode of expression best represents or conveys the thought. For example, if they are studying a people—its history, life, customs and dress—and can convey to others the results of this study more clearly by painting or modeling or by acting out some scene than by speech, they do it, not because they happen to do these things well, but because form, color, and movement more fully express what they wish to tell and are with the little children easier to command than speech.

It is evident that the exercises grow out of the daily work of the School or out of the interests of the children in some large absorbing outside question. They are usually the culmination of some line of study. The subject is sometimes science, the telling or illustrating of nature observations; the story of some visit to the farm, the art gallery, or workshop; history, current events; the massing of the literature and music of some special subject or special day; the telling of stories that delight the children's hearts; or the discussion of some problem of vital significance in the community-life of the School. Therefore the exercises, instead of interfering with the school work, emphasize, reinforce, and vitalize it; give it purpose and form and furnish the best test of the children's growth and power to think and of their skill in expression.

The special-day exercises are but a broadening out of these daily exercises, and the children take part in them simply and naturally with as little self-consciousness as on ordinary occasions. The great racial festivals are but the culmination of some phase of life through which the race has lived: Thanksgiving is the harvest festival, nature's great climax; Christmas, the triumph of light over darkness, of good over evil; the birth of Christ, the Light of the World; Easter, the new life of spring, the regeneration of the spirit, the resurrection of the Lord. A study of the history of these festivals and of the different ways of celebrating them, leads not only to the life, customs, manners, and dress of the peoples of the earth, but gives us glimpses of their spiritual life, their aspirations, and their hopes. It teaches the continuity of history, the oneness of the race, and the brotherhood of man.

Our national holidays are also the culmination of the working out of some great movement in the national life: Washington's birthday, the travail of the nation's birth and strenuous early life; Lincoln's

birthday and Memorial Day, the climax of the tremendous national struggle over human slavery. The children cannot celebrate these days without some insight into causes and effects and into the trend of government. They cannot celebrate these days without some appreciation of the quality of the men, the high ideals of character, citizenship, statesmanship, self-sacrifice, and the spirit of pure democracy that moved those who shaped the destiny of our country. These are surely wise and profitable teachings for all American boys and girls.

The value and scope of such exercises must be determined in the end not by theories but by the effects upon the life and character of the children and upon the spirit and work of the School.

A common objection to such exercises is that they hinder and interfere with the work of the School, disorganizing it, and dissipating the children's time and energy, and furthermore are the cause of undue excitement and consequent nervous strain, and of that love of "showing off" which leads to self-consciousness and egotistic selfish action. But the few schools in which the exercises have been made an integral part of the work of the children and of the daily program can bear witness to the theory set forth here: namely, that the exercises act as an intellectual stimulus, intensifying thought, concentrating energy, and, by co-ordinating and controlling the impulses to express, become a reconstructing force, a process of further control and organization; also that they make for order and courtesy and are a large factor in unifying the school and teaching the child the individual's place and duty as a citizen of the school community, and thus are a wholesome training in altruistic thinking and living.



EXERCISES SHOWING TYPES OF PREPARATION

Preparation of an Exercise on William Blake

The Making of a Play in a Primary Grade

Preparation of an Exercise on Historical Methods in Arithmetic

Preparation of an Exercise on the Great Ice Sheet

Preparation of an Exercise on the Age of Elizabeth

Preparation of an Exercise on Cicero

PREPARATION OF AN EXERCISE ON WILLIAM BLAKE

During a month's study, a fourth grade learned to love a few of Blake's poems. In order to illuminate them, the teacher told incidents in the poet's life. The children drank in these anecdotes with avidity, especially the ones about the visions. Blake's experiences evidently seemed like fairy tales come true, and the poems took on new significance and interest. One boy brought pictures of Westminster Abbey, where Blake drew; another one hunted out some lines of Blake in a book of verse; a third brought a volume of Blake's poetry and a book of his drawings; a girl begged her mother to buy "Songs of Innocence"; another looked up Blake's life in an encyclopedia and contributed information to the class. Practically all the children eagerly made sketches to illustrate the anecdotes or the poems. These drawings had a crude imaginativeness and freedom of expression that bespoke fitness in the subject. By all these activities, the matter was held before the children's minds and was repeated and emphasized into vividness.

Below are given a morning exercise and a stenographic report of two recitations in which we planned the exercise as a culmination of our study.

Teacher. How many think reading these poems of Blake would be a good morning exercise? (*Many hands.*)

Teacher. Let us think about such an exercise. What would you do?

A child.* Read the poems and ask them to guess.

Miriam. We might play some of them, or some parts of them.

Karl. I think poems are for reading. A man will make a book, or turn a book into a play, but a poem is for reading.

Teacher. How many think a poem is for reading? (*Many hands.*)

Robert. Because a poem is more beautiful.

Teacher. What is beautiful about it?

William. The old-time words that people use. They sound so pretty.

Alexander. If you act it you cannot get the color, the trees, the angels, and many things, and it would not be half so beautiful as reading it.

Teacher. What poem is Alexander thinking about?

All. "The Night Song."

Child. You could not have sheep and lions.

*The stenographer who was taking notes did not always know the name of the child.

Louise. You could not have the rhyming words.

Teacher. (*Reading.*)

The moon like a flower
In Heaven's high bower,
With silent delight,
Sits and smiles on the night.

What words rhyme there?

Children. Flower and bower; delight and night.

Teacher. Is that all you meant that we should miss from the poem if we acted it?

Miriam. The loveliness of it, and the words rhyming like a song.

Teacher. I think you don't mean rhyme. (*She scans a verse.*) What is the difference between that and ordinary talking?

William. It kind of beats like music. It has time.

Teacher. We call that rhythm.

A child. We would lose that too, if we made a play.

Teacher. Then let's give up playing them. What next?

Frederick. Read the poems.

Teacher. Is that all we want to do?

Robert G. If it is just going to be Blake's poems, I think we should tell something about him.

Teacher. How many like that idea? (*Many hands.*)

Teacher. What things shall we tell about him?

(*Teacher writes topics on board as they are suggested.*)

Child. Where he was born.

Child. What he was interested in.

Child. His visions.

Teacher. What visions?

Child. When he saw the child in the cloud.

Child. The tree full of angels.

Child. Fairy's funeral.

Child. The men he saw go to the altar—the apostles.

Miriam. One time he was sitting on the seashore, and saw the kings and all the pages, and the people going along the shore.

Karl. And once when his brother died he thought he saw his soul go up to heaven.

Mary. How he came to write his poems and how he learned to engrave.

Charles. You would not call it sculpture if he engraved things?

Teacher. Who will set Charles right?

Charles. A sculptor makes statues from marble and an engraver carves great stones.

Teacher. No.

Alexander. They have copper plates and with a sharp tool do what they want to on this and then fill the lines with ink and press it down on paper or whatever they are going to put it on.

Teacher. What other points do we want about Blake?

Child. How he used to go to Westminster Abbey and draw statues.

Teacher. Should you like to have someone who knows about his drawings tell about them at the exercise? You don't know his drawings. They are strange and weird. I have seen some of them and maybe someone has seen a whole book of them.

All. Yes.

Teacher. I will try to find someone who knows about them.

Child. Should we not tell about the wife who did not know anything, and he taught her and then she helped him with all his things—and the name of his first book—"Songs of Innocence"—and why he named it that?

Teacher. And about the long walks that he and his wife took together?

(*No more points suggested.*)

Teacher. What poems do you know of Blake?

Children. "Laughing Song." Introduction to "Songs of Innocence." "Night." "The Lamb." "The Tiger." "The Shepherd."

Child. Can't we sing "The Shepherd" at the beginning of the exercise?

Teacher. What grade can sing it?

All. We can.

Teacher. There is a very interesting fact connected with the song that I think you don't know.

Chorus. Tell us.

Teacher. When the present eighth grade were in the second grade, they had that poem. They were the first children in the School who had it, and they loved it and used to say it very often. Mr. Cornish, a young man who used to help teach music, heard the children saying their poem. In the spring vacation he thought about it a great deal, and one day when he was out of doors he made up a tune. When he got back to school, the first time we went into the music room, he played it for the children, and they liked it and learned it and sang it for the School. So it is really a Francis W. Parker song. Does that make the song more interesting to you?

Chorus. Yes.

Teacher. Do you think it would be a good plan to have some one in the eighth grade tell that in the morning exercise?

Chorus. Yes.

Teacher. Is there another of the poems that you have heard before this year?

Child. Yes, "The Lamb." The second grade read it at morning exercise last year.

Child. "The Tiger," by the present sixth grade when they were in the fourth grade.

Teacher. Miss Cleaves said that the present twelfth grade, when in the eighth, studied a part of a poem called "Jerusalem."

Child. Ask the twelfth grade to read it for us.

Teacher. What do you think about the other two?

Ned. Have some one say them.

Frances. Leave them out; for everybody has heard them, and maybe there would not be time, and they would rather have those that they have not heard.

Teacher. Do you think the fact that someone has heard a poem is a good reason for leaving it out of the exercise?

Robert G. No, because every year new children come to the School and they would not know it.

Miriam. If you like a book very much it does not make any difference. You like to read it again and again, and if they are lovely most everyone would be glad to hear them over and over. Then you get the real meaning of it. Maybe the first time you don't listen well enough, but after a few times you get the full meaning.

Child. Have the third grade and sixth grade and twelfth grade and eighth grade after we are through with all of ours, if there is time. Have our part first and then have the other grades.

Teacher. What do you think is the advantage of having people in other grades help in this exercise?

Child. We learn something we don't know.

Mary. They might know more than we do about it and when they read, would explain.

Ned. People might think we are selfish and want the exercise to ourselves, and it is nice for us to hear them instead of our doing it, and it might be good for them to read it.

Child. If one of the sixth grade knew they were going to read a poem, they would be more interested in the exercise until it came their time to do something.

Teacher. We shall have to decide between now and next Monday who is going to read these poems and who will tell about the different points we have put on the board. Tomorrow let us hear the people who choose to tell about Blake. We will try to get time to hear the poems too.

SECOND DAY

(On the board was the list of points planned the day before, with names of children volunteering to talk on each topic.)

Teacher. Yesterday we began to plan our morning exercise about Blake. Without my saying anything, let the children come in the order in which their names appear on the board. And remember that you must connect with one another, so the story will be complete.

René. This is going to be a morning exercise about William Blake. I am going to tell you when he was born and when he died. William Blake was born in London in 1757, and died in 1827.

Mary. When Blake was a little boy, he loved to draw and used to illustrate his own poems. He went to Westminster Abbey and drew different things around there. He drew all his life and did most of his drawing before he was married, but after he was married he kept it up and illustrated the rest of his poems.

Frederick. Blake's wife did not know how to read and write, so he taught her, and it was hard for him because he did not know very well either. He loved to live out of doors, and they took long walks and sometimes went thirty miles. They would stop at an inn, and then go back to their home at night.

Frances. When Blake was a little boy, he never went to school but learned by himself. When he was twenty-five years old he married Catherine Boucher. Though she was very talented, she could neither read nor write, but he taught her.

Henry. William Blake was a very good man, and some things were very queer about him. I think these are true. He had quite a number of visions. Once he was at the seashore and thought he saw a lot of kings and queens marching along the sand. Another time, when his brother was very ill and died, he thought he saw his soul, clapping his hands and going up to heaven. When he was a little boy and was going through a field he thought he saw a tree full of angels, and he thought the reason he could make poetry was because his brother's soul used to come down and tell him what to write.

Karl. William Blake had a great many visions. These are some of them. One time when he was down by the seashore, he thought he saw a procession of old-time people of history marching. One time he was nursing his brother, and, when the brother died, he thought he saw his brother's soul go to heaven clapping his hands. When he was a little boy walking through a field, he thought he saw a tree full of angels, and one time sitting in his garden, suddenly he saw some little creatures coming along carrying a little body. They dug a hole and deposited it there. Once when he was in Westminster Abbey, drawing pictures, he thought he saw the twelve apostles of Christ going to the altar.

Teacher. What do you think? Does that do what you want done for the story? I am not asking you to choose the people who seem to you to do it best, but whether you think it is right for the story of Blake's life. Or are there things left out, or is it not pleasant the way it is planned?

Child. I don't like the way some of them said he saw his brother's soul clapping his hands.

Teacher. But that is what Blake said.

Robert G. I think someone ought to tell about his engraving.

Mary. I thought you only wanted the drawing. I can change it.

Teacher. It is not true, Mary, that he did most of his drawing before he was married. He went on all his life. All the famous book-drawings he made later in life. And, Fred, you gave me the impression that Blake did not know very much.

Frederick. Well he did not go to school, did he?

Teacher. No, but he studied and was an educated man.

Frances. He said he got his education from reading. He read all the time.

Teacher. What do you think about what René had to say, John? (*René was the first to speak.*)

John. I don't think it was quite enough.

Child. I think he ought to tell more dates, when he started engraving and those things.

Teacher. How many were interested in what René said? (*A few hands.*) How many were not? (*Many hands.*)

Teacher. Why was it that what he said was not interesting?

Carl L. He just said a little about when he was born and the date when he died.

Teacher. And that is not interesting to you?

Chorus. No.

Teacher. I am going to tell you when William Blake was born and when he died. William Blake was born in 1757 and died in 1827.

Chorus. No.

Teacher. What don't you like about it?

Alexander. He just said it as if it was written down on the board and he was reading it. He should have left out, "I am going to tell you when he was born."

Teacher. Now count these words. "I am going to tell you when William Blake was born and when he died." (15 words.) Now count these. "William Blake was born in seventeen fifty-seven and died in eighteen twenty-seven." (12 words.) It took fewer words to tell the fact than it did to say I was going to tell it. Well, I think just as you do. It doesn't start off in an interesting way. Then I felt it was all kind of chopped up. What would you do, William?

William. I don't just know. Each, I think, took a point out of a different part of the book and told about it.

Robert G. When he started about William Blake he might have told first about his birth and gone on until he had finished that point, and then taken up other points, and after it was all finished, told when he died.

Miriam. First tell that William Blake was born in 1757, and that when he was a boy he never had any schooling, but when he got to be a man, he taught himself how to read and write, and when he married, he taught his wife to do the same. And then tell that he died in 1827.

Ned. I would have someone say, "The fourth grade is going to tell you about William Blake and read some of his poems"; then say when he was born, a little about his life, about his wife, about the walks, his visions, and what he did just before he died.

Teacher. You mean, have one person tell the whole story?

Child. Yes.

Mary. Change the order of that and have it all blended in. Finish one point up before taking another, instead of skipping around and going back and chopping it up.

Teacher. Do you like that?

Chorus. Yes.

Teacher. I like the idea too. Let us try having one person tell it all and see whether he can blend it. Henry, try it.

Henry. William Blake was born in 1757 and died in 1827. He did not go to school, but taught himself to read and write. When he was married his wife did not know how to read and write, and he taught her. It was very hard for her and him both. They liked to live out of doors very much and sometimes they would take a thirty-mile walk, would stop at an inn, and walk back in the night. After William Blake was fourteen years old, he started to engrave and he drew all his life. He illustrated his own poems.

and his wife helped him in all his drawings. William Blake had many visions. One time he was at the seashore and thought he saw a long procession of great people walking along. One time at Westminster Abbey, he thought he saw the Apostles of Christ at the altar. One time in his garden, reading, he saw a line of little people moving, and it was a fairy's funeral. One time when he was a boy walking through a field, he saw a tree full of angels. There were a great many visions, and I could go on naming them all through the morning exercise.

Teacher. Which plan do you like better—having one person tell the whole story or different ones tell it?

(One person telling the whole story carried.)

Teacher. Why?

René. There is not so much shuffling of shoes and stumbling up and down stairs.

Child. It does not take so much time for many to go up and down the stairs.

Mary. One person keeps his idea in mind all the time, while many people would not do it so much.

Teacher. There are only two people who like the plan of having separate people tell the stories, so let's decide who shall tell this whole thing. Tomorrow let everybody be ready to tell an interesting story about Blake. We might divide up into several groups of four or five people each. Everybody will have a chance to tell his story to the group. Each group will choose the best one. Then we will hear those chosen and decide upon one to do the work at the morning exercise. How will that do?

Chorus. Yes.

Teacher. Now, what are the things going into that story tomorrow? Think it over.

Children.

Birth.	That he was the son of a hosier.
First Book.	Why he did not go to school.
Poems.	Studied by himself.
Visions.	Boyhood.
When he died.	How he became an artist.
Walks.	Engraving.
Marriage.	Work at Westminster.
Teaching wife.	Age when he started to draw.
	Age when employed as an engraver.

Miriam. What would you do afterward?

Ned. Sit down and have the poems.

Miriam. One person might tell the whole life, but not read the poems, would he?

Teacher. No. Here is our program as we decided yesterday:

One person tells his life.

Nine fourth-grade persons read poems.

One third-grade person reads "The Lamb."

One sixth-grade person reads "The Tiger."

One twelfth-grade person reads "Now Bring to Me."

One eighth-grade person tells about the music to the song, which all the fourth grade will sing.

THIRD DAY

Telling of the story in groups and choosing of one person was done as planned. In another period, every child in the class read one or more of his favorite stanzas, and the class chose the people who should read at the exercise. Later, the story-teller and the readers rehearsed once in the assembly-hall.

Morning Exercise

Frederick. We are going to read some of William Blake's poetry. William Blake lived about one hundred years ago. He was not a very strong boy—was different from other boys—and the other boys used to tease him, and he would get into a fuss with them, and so his father thought he had better not go to school. So he never went to school and stayed at home and learned to read, himself. His father saw that he had a good talent for drawing, so he wanted to send him to an art school. But William Blake said he would not go, because it would cost too much money and would not be fair to the other children, and wanted his father to make him an apprentice, to learn engraving. So while William Blake was an apprentice, he had five years' study at Westminster Abbey, and he would go there and draw the statues. When William Blake was twenty-three years of age he married. The woman he married was very talented, but she could not read or write, but he taught her to read and write, and she helped him with his poems. William Blake loved to be out of doors. He and his wife would take walks about thirty miles, and then they would come back at night. William Blake had visions. One time he was at the seashore, and he thought he saw a procession of great people—kings and dukes and lords, and all the past people of history. Another time he was out in a field and he saw a tree full of angels. Another time he was at Westminster Abbey and he thought he saw the twelve apostles of Christ around the altar. One time he had been nursing his brother, and his brother died, and he thought he saw his brother's soul going up to heaven clapping his hands for joy, and he thought his brother's soul came down and helped him with his drawings. I am going to read you another of his visions. He told this story to a lady. (*He reads from book.*)

"I was writing alone in my garden; there was a great stillness among the branches and flowers, and more than common sweetness in the air. I heard a low and pleasant sound, and I knew not whence it came. At last I saw the broad leaf of a flower move, and underneath I saw a procession of creatures of the size and color of green and gray grasshoppers, bearing a body laid out on a rose-leaf, which they buried with songs, and disappeared."

A Teacher (by previous request). Blake seemed to see farther into things than a great many people. When he was looking at an ordinary landscape, or a human being in the street, he would see what he called the

"spirit" or the "soul" of the thing or person, and he was always trying to draw the things that he saw that other people did not see—he seemed to visualize the things that he could not see with his eyes. He knew a great many people who were writing in London, and he drew caricatures of them, the humorous side of their characters. He thought that every flower, or animal, or tree, had a spirit and soul, and he drew what he thought was the spirit of the rose. He read the Bible a great deal, and was very fond of the Books of Job and Revelation. Here are two pictures of his, on the stage. This first one is where the Lord appears in a vision to Job, and the other is where the morning stars are singing. I am going to read you a few verses from Job: (Job 38:1-7.)

Teacher. For several years now we have been using Blake's poems in the school. One of these the children of the fourth grade are going to sing to you.

Song. "The Shepherd."

Ada (eighth grade). The eighth grade feels that this song belongs to them, because when we were in the second grade we studied about the shepherds, and when Mr. Cornish found that we were so fond of this poem about the shepherd, he set it to music for us. And it was a much delighted second grade when this song was brought in.*

Teacher. The third grade (last year when they were in the second grade) learned one of Blake's poems. Juniata will recite it now.

Juniata recites "The Lamb."

Teacher. When the present eighth grade were in the fourth, some of them were very fond of "The Tiger." Hermon will recite it.

Hermon reads "The Tiger."

Teacher. When the present twelfth grade were in the eighth, they studied a few lines of Blake. Doris gave them in a morning exercise then. She is going to give them again.

Doris reads "Bring me my bow of burning gold."

Teacher. We have learned three new ones this year.

Charles (fourth grade) reads Introduction to "Songs of Innocence."

Mary (fourth grade) reads "The Laughing Song."

Louise, Margaret, William, Henry, René (all fourth grade) read the six stanzas of "Night."

*NOTE—A curious and amusing mistake occurred concerning this point. The teacher who did the work mentioned in the second grade, remembered the wrong class as having been the recipients of Mr. Cornish's gift of the song. In some strange way (by unconscious suggestion, doubtless), the class which she thought the right one apparently remembered the incident in all its details, and recited them to their eighth-grade teacher, when she asked about the song. One of them volunteered to tell the school. After the exercises, however, some members of the ninth grade went to the fourth-grade teacher in mingled amusement and displeasure, averring that it was their class for whom the song had been written. Records were ransacked, and their contention was found to be right. In accordance with their own plan, two or three mornings later they helped the fourth grade to sing the song again and one of them explained as follows:

Geneva (ninth grade). The ninth grade was quite shocked the other day when the eighth grade people announced that this song had been written for them. When we were in the second grade, we were very happy indeed when Mr. Cornish wrote the music for these words for us, and we don't want you to think that there are only two of the second grade people left, because there are about six of us.

THE MAKING OF A PLAY IN A PRIMARY GRADE

For several years the historical study in the fourth grade has been Greek life and story, and it has constituted the children's chief interest. The subject was chosen because it gave scope to the free expressiveness of children of this age. It gives fresh material, too, for fancy, which at this time is still active but is beginning to veer off from childish fairies and their like. It feeds the love of beauty which is here coming to birth, but easily dies from lack of careful tending. As the year has been planned, the children hear and read stories of gods and heroes, of nymphs and fanciful beings. They learn how the Greeks worshiped and how they felt toward gods and mountains and sea. They study the life of the people in their homes, their schools, their market-place, their theater. They see Greek vases and casts of Greek statues, and learn the story of their making. They hear how men have uncovered Mycenae and Olympia and many a beautiful statue. As they acquire this knowledge, it must always break bounds and escape into expression. They make vases after the Greek shapes and make such paintings as they think a Greek potter might have liked. They play sculptor and make clay statuettes of their favorite gods and mould figures to illustrate a story. They model Mycenae in sand-pans, ruin it, cover it, and become the excavators who bring its treasures to light again. They write prayers to Dionysus and stories such as they think Orpheus might have sung. They play Greek games and wear Greek costumes, and, what is more to the present point, they are continually acting out stories or incidents that please them. Today, as the heroes of Troy, they have a battle at recess time with wooden swords and barrel covers. In class time, with prayers and dances and an extempore song, they hold a Dionysiac festival. Again, half of them are Athenians, and half of them Spartans in a war of words as to which city is more to be desired. Or they are freemen of Athens, replying spiritedly to the haughty Persian's message. Always what goes in as knowledge must in some way come out as action—painting, drawing, modeling, singing, writing, dramatizing.

Three or four years ago, a class had read a tale of Achilles at Troy and had been strongly interested, some of them violently siding

with the hero against the "dog-faced" Agamemnon, others rising to a moral height and nobly blaming him for his selfishness. I thought I saw a chance to drive the moral lesson a little deeper. It would be good, moreover, to purge our souls in Aristotelean fashion by acting out these seething emotions. With a theme that so enlisted feeling, we should surely get vigorous, creative acting. So I suggested making a play. As always, the idea was hailed with joy.

Many times before this I had had experience with plays so sliced up into acts that drawing the curtain had occupied more time than the dialogue. My excuse to myself had been that that was the way the children had planned it. But I had now begun to think that it was as much my business to supervise children's play-making as their number work, and not to let their untrained habits run riot there any more than among the multiplication tables. So I took a short cut and said: "Now, let's not try to tell the whole story of Achilles in our play, but just his getting angry and getting over it." The suggestion was adopted.

Now attention was focused upon a small area of the story, and some fulness of delineation was possible. There is always, I suppose, a good deal of vagueness and delay in the attack. When your boat lies beached, it takes much shouting and running about to get it launched. "What is going to happen first?" was our starting question. "The quarrel," was the class answer. Now, to be sure, not all the children at once cried one answer in one voice. But the same thing happened that we all have seen occur in a large social group—be it a class of children or a political convention. Some original genius ventured a suggestion. This released the gears in other brains, and more suggestions came. Analytical minds saw difficulties and advantages; opinions were modified, and new suggestions made, until one came that brought a glow and a nod of satisfaction from the majority of the class. That one we adopted, and we then moved forward at my command, for creation must go on with a dash, while the fife and drums are playing. So any piece of composite work, as opposed to individual writing, hints at dead and wounded ideas and lost causes along the line of march. Generally it is worth while to stop and argue out a moot point, but if there is a sign that the interest of the majority is flagging, up standards and forward! and leave the malcontents to clamor. "What shall happen next? and next?" So we worked out our plot-quarrel, meeting to discuss how

to get Achilles back, Achilles' refusal to return, death of Patroclus, reconciliation of Achilles and Agamemnon. The children pondered the plot with delight. The climax perfectly satisfied them. Achilles and Agamemnon should shake hands and say, "Let bygones be bygones," and we could forgive Achilles and be happy.

This planning was all done in one day. The next morning, I saw that the children were hungry for acting, and that they must not be put off with further planning of details. I chose the most enthusiastic volunteers for Achilles and Agamemnon and Calchas. They came up to act and flatly failed—could not think of a word to say. Then I asked, "Well, what could they say?" We heard any speech that anybody had to offer, picked another troupe and tried again. Next day there was less eagerness about volunteering to act, and someone explained: "You get up there and you don't know what to say." So we thereupon set about planning the speeches of the scene. A child gave a speech, another improved it, a third offered a substitute, the class expressed its preference, and I wrote it down. Then on to the next! On the following day, the scene as composed was on the board, and the class read it aloud to hear how it sounded. There was sharp criticism, and we made many changes. Often children referred to the story in the books and found speeches there and read them aloud. Once or twice, discouragement or weariness threatened when we lingered too long over a point, and I had to say: "Let's change that later and go on to the next speech." Or perhaps I could give a satisfactory sentence myself and end the trouble—anything to make the period close with an agreeable feeling of having done something good and of having got on a long way. When the play was finished, we acted it to our own great joy and to the more tempered pleasure of the school audience.

Three years later I was casting about for some means of reviewing and clinching the story of Achilles for another class, and I put into their hands copies of the old play. "Oh, can't we act it?" was the cry. We did so then and there, and the children wanted to play it before the whole School at morning exercise time. But I remarked that every class ought to do a little better than its predecessors. Could they improve this play? There were a few children in the group with unusual literary appreciation. Moreover, we had read and studied some of Lang's beautiful translations of the Homeric Hymns, and they had quickened the "love of lovely words." Now one of these

appreciative people said concerning the old play: "The words aren't very pretty. They sound too common." Several people agreed. Then we studied the play, speech by speech, and these gifted ones here and there embellished the original. Once I read the words that Homer puts into the mouths of the heroes. It was hard reading for children, but many of them greeted it with wondering joy. "Let's have it just like that," some said. But the Philistines objected; "It's too long. Nobody could learn that." Others, whose ears were open, said: "It doesn't sound like the rest. If we have that speech, we'll have to change the whole play." On some days the literary coterie won the point, on other days the utilitarians; often we compromised, and sometimes I put in a tiding-over sentence, so that in the finished play there is a good deal of fluctuation in the style. There was often a call for the Iliad, when invention failed. Its use reacted upon the children's own vocabulary. "I will not slay you," someone suggested for a certain speech and explained that he used "slay" because "kill sounded ugly." Another much-discussed sentence was: "These golden cups are beautiful; they shine like the stars." Somebody had said, "They glitter like the sun," but one boy was eloquent in opposition. "Glitter sounds cheap," he said. "It sounds like a Christmas-tree ornament; and the sun is awful bright and it hurts your eyes. I think it would be better to say, 'Shine like the stars.'"

After they had worked with the play for a little, the class thought that it did not feel ended with the reconciliation of Achilles and Agamemnon. "He" (that is, Achilles) "hasn't *done* anything," one little girl said. "We want people to like him. I think he was awfully generous when he was nice to Priam. I think we ought to have that part." But by this time the class was a bit exhausted by its creative labors. So I appointed a committee of five from among the unwearied literary ones (and these were, of course, the most fluent readers). I put the Iliad into their hands, with some places marked where I thought they might get help, and let them work together for three or four periods in a snug, retired corner of the hall. They wrote the last act much as it appears below, though, in the hurry of preparing it for the printer, I tinkered it a little in the interest of continuity. My purpose in so doing was not to embellish the play for publication but to forestall disappointment among the children when they should subject their composition to the severe test of dramatic study and presentation. But in one instance I overstepped the bounds. The

Iliad has Priam speak of the "grievous pathway of old age," and the committee had so transcribed it. I, however, thought this too bitter a touch for younglings and eliminated the adjective. Our Priam was one of the committee that had written the act, and after she had received her printed copy she came to me privately and said: "Oh, why did you leave out 'grievous?' I like it so much! It sounds so pretty! Can't we have it in?" Of course it was restored. Let this one example serve as witness of the fact that to the children almost every word of the play was vitally significant.

The dialogue changed somewhat during rehearsals. In two or three places an actor felt awkward and said: "I ought to have something to say." An instance is where the visitors entered Achilles' hut and shook hands in silence. Discomfort and awkwardness were patent. But when each actor had improvised a sentence of greeting, commonplace though it was, the whole feeling of the scene was changed. In other places a speech proved to fall short of the occasion. Perhaps the developing emotion outgrew it and perforce improved it. Our Priam, for example, at first had the light manner befitting an afternoon tea. Yet, one day, after the class had tried by various means to make her feel the sadness of the old king's situation, she leaped suddenly to appreciation of the tragedy. Then, under the stress of her new emotional understanding, she said: "I'd rather say something that isn't printed. I want to say, 'Now, who would have thought that Achilles would do a favor for an old man with gray hair?'" This plasticity is one of the greatest advantages of a home-made play—it is always in the making. The condition of change and flexibility is the atmosphere which best engenders creative and really interpretative work.

When we acted our play the children were in Greek costume, but they had already worn it every day for three or four months. Indeed, they thought they *were* Greeks. The cast is largely composed of warriors, yet we had only one piece of armor—a great shield to make Agamemnon feel kingly. Every boy, however, by hook or crook, possessed himself of a sword or a spear and felt as fierce as Ares. As for setting, we had bare walls and empty stage, except when it was necessary for someone to sit down. Then we had backless benches that we had made. At first the children wanted to build the prow of a ship out of cardboard to lend realism to the scene where Achilles is watching the fight. But that could wait, of course, so we went on

with our rehearsing on a bare stage. Meantime, true interpretation seemed to gain importance in the children's minds, and accessories lost it; for toward the end no one again suggested the ship's prow, and the bare stage quite satisfied everybody. A judicious lack of attention to minor matters often will put them into their place in this way. And what we want is utter simplicity of staging as of acting. We are striving, not to please the audience by a finished production, but to help our actors to grow in expressiveness, in completeness of dramatic imagery, in power of emotional conception.

The Wrath of Achilles

(Made and acted by the Fourth Grade, Francis W. Parker School.)

ACT I

(Soldiers are gathered about a pile of spoils. Two slaves sit crouched among the treasure.)

Agamemnon. We have fought a brave fight today. I am proud of you, my men. We have captured a city, and have brought home much spoil. What shall be done with it?

First Soldier. Let us divide it among us.

All. Aye! Aye!

Second Soldier. But the bravest deserve the best.

Third Soldier. To our leader, Agamemnon, let us give these golden dishes and the beautiful maiden Chryseis, for a servant.

All. Aye! Good!

Fourth Soldier. Achilles has done many brave deeds today.

All. True! Aye! Achilles!

Third Soldier. He saved our lives!

Fifth Soldier. It was he who broke in the gates!

Sixth Soldier. Many treasures he captured! Let us give him the best!

All. Aye! The best! Achilles!

Seventh Soldier. Let us give him beautiful Briseis to serve him.

All. Aye-aye! Aye!

Seventh Soldier. And now for our share!

(Soldiers divide the spoils, talking as they do so.)

First Soldier. I got this sword from the king's palace.

Second Soldier. Ah! But these golden cups are beautiful! They shine like the stars.

Third Soldier. This goblet looks as though it had come from the house of Apollo.

Fourth Soldier. And this plate has the carving of Athene on it.

Fifth Soldier. Here is the tripod that held the holy fire.

Sixth Soldier. We have many spoils, but we have not yet rescued Helen.

Seventh Soldier. Ah! If we could only get Helen back and end this long war!

First Soldier. But tomorrow we must fight again!

(Chryses enters.)

Chryses. Noble Agamemnon and brave Greeks, may the gods be kind

to you! May you get back Helen! May you go home happy! But give me back my daughter, Chryseis. Take this gold and give me back Chryseis.

Second Soldier. Give him back his daughter.

Fourth Soldier. He is a good old man.

Fifth Soldier. Besides, he is Apollo's priest.

Sixth Soldier. Let him have the girl.

All. Give back Chryseis.

Agamemnon. Be off with you, old man! Come no more among my hollow ships. I will carry your daughter far away from her native land, to Argos, where she shall serve me as my slave. Many a weary hour shall she sit at the loom and weave the tiresome time away. And she shall spread my bed and grind at the mill. So be off with you before I grow more angry.

Achilles. Ill will come of this, Agamemnon.

(Chryses turns to go. He lifts his hands and prays.)

Chryses. O Apollo, lord of the silver bow, giver of light, god that rulest over Chryse, hear me! If ever by word or deed I have gladdened thy heart, or if ever I have built a temple in honor of thy name, fulfil my wish! Let thy death-bringing arrows fly fast against these scornful Greeks. Let them suffer as I suffer for my daughter.

ACT II

(The same place as in Act I. The warriors come walking sadly in.)

Agamemnon. For nine days Apollo's arrows have been flying thick upon us. Many men have died. We shall all perish under the plague. Is there no one here who can tell us why it is that Apollo is angry at us?

Calchas. O Agamemnon, I am a prophet of the gods, and I can tell. It is because we have taken Chryseis away against her father's will, and the priest of Apollo has prayed to the god for revenge upon us, and Apollo has granted his prayer. Therefore, the plague has come upon us. If you will give up your slave, Agamemnon, Apollo will shut his quiver and return to Olympus, and we shall escape from his wrath.

Agamemnon. Speaker of evil! Never yet have you told me a thing that was pleasant. And now you lay commands upon me! I must give up my prize for the sake of an old man! But I will keep her!

Calchas. Then beware the wrath of the god! You and your army will die beneath his death-dealing arrows.

Agamemnon. She was my prize. *(Soldiers mutter.)* Yet I will give her back, if that is better. I cannot see my people perish. But shall I go without any prize? Make me ready some other gift.

Achilles. How shall we give you a prize now? They have all been given out to the men. Shall we go begging them back? Wait until we capture another town, and we will give you three times your share.

Agamemnon. I will not wait so long for my prize. Yours I will have. Beware, Achilles, I will come to your hut and take Briseis and keep her!

Achilles. Dog-face and heart of a deer! *(Draws sword. Soldiers prevent his striking Agamemnon. He grows more calm and thrusts back his sword.)* I will not slay you, but I will speak my word unto you. Fight your own battles if you can. I have fought them for you long enough.

Capture your own cities and win your own prizes. I will not belong to an army led by a coward. I will go back to my ships and watch your brave deeds. And hereafter deep longing for Achilles will come upon the Greeks. And you will not be able to save them when multitudes fall dying before man-slaying Hector. Then you will tear your heart because you did dishonor to Achilles. (*He walks out, followed by Patroclus and a few others.*)

ACT III

(*In Achilles' hut. Achilles is playing his lyre. Patroclus is listening. They are both unhappy.*)

Patroclus. What weary, dragging days! To hear the good din of battle and be held back from the fray like a dog in leash! O Achilles, let us go and help our comrades!

Achilles (singing).

*Oh! I'm thinking of Hellas, of far-away Hellas,
Where the green hills are lying,
Where the sunlight is dying,
On the far-stretching fields of my Hellas.

Oh! I'm thinking of Hellas, of far-away Hellas,
Where the waters are flowing,
Where the cattle are lowing
On the wide, sunlit fields of my Hellas,
My far-away Hellas.

(*He looks out through the door.*) There are some of my old friends, the Greeks. I see my old teacher, Phoenix. Odysseus and Ajax are with him, and there are two heralds. They must have some message for me. What can it be? (*Ajax, Odysseus and Phoenix enter.*) Welcome to my hut, my friends. It is long since I have seen you.

Ajax. It is pleasant to see your brave face again.

Phoenix. Ah, how good it is to be under your roof once more, Achilles!

Achilles. Patroclus, mix a sweet drink and spread rugs on the chairs. Make ready a feast. The dearest of men are these that are under my roof. Oh, I am glad to see you again, my friends. What is the news of the camp?

Ajax. It is in a sad plight. Many of our best warriors have been killed.

Odysseus. Hector is raging like a lion. He says he will break into our camp and burn our huts and our ships.

Ajax. The Trojan army is camped under our walls.

Achilles. That is sad news.

Phoenix. The Trojans have driven us inside our walls and have camped before our gates.

(*Slaves bring in tables of food. Men feast and talk.*)

Achilles. I see you are wearing a new sword belt. Ajax.

*See page 91 in Year Book for 1912.

Ajax. Yes. The armies were resting the other day. Hector came out and called for a Greek to fight a duel with him. So we drew lots, and I was chosen. After a long fight the heralds came between and stopped us because it was growing dark. Then Hector said: "Ajax, you are the best of the Greeks, now that Achilles is gone. Will you wear my sword belt in memory of our duel?" So he gave me his belt, and I gave him mine. I am proud to carry such a brave warrior's sword.

Achilles. Tell me more of that duel.

Ajax. We fought hard and long. I gave Hector a wound, and his spear went to the last layer of my shield, but there it stopped and broke. When our spears were gone, we fought with great stones. I threw a heavy rock at Hector and struck him to the ground. Then the heralds stopped us.

Achilles. That was a brave fight! I wish I might have lent a hand!

Phoenix. We have only a little food in the Greek camp now. The Trojans have kept us so busy fighting that we have had no time to go foraging.

Odysseus. We have feasted here to our heart's desire. But our thoughts are not now upon delicious food. Fear has come upon us in the Greek camp. The Trojan fires are burning below our wall, and Hector has passed his word to smite off the beaks of our ships and to burn the hulls. I am sore afraid in my heart that the gods will grant his boast. I fear it is fated for us to perish here in Troy-land, far from Hellas. Up, then, Achilles, if you are minded at last to save the failing sons of the Greeks. If you do not, you will grieve hereafter, and when the ill is done there is no way to find a cure. Remember what your father said on that day when he sent you to Troy: "My son, the gods have given you strength, but do not on that account keep a proud heart in your breast. Gentleness is better." Swallow your anger now at last, and come and help us. Hear what Agamemnon promises you. Seven tripods you shall have and ten talents of gold and twenty steaming caldrons, and twelve stalwart horses that have won prizes in the race, and seven women slaves, and Briseis, also, he will give back. And if we win Troy and return home, you shall have his daughter for wife, and he will make you king of seven cities. But if Agamemnon is hateful to your heart, take pity on your friends. They will honor you like a god.

Achilles. Hateful to me are these gifts, and Agamemnon himself is not worth a straw. Many a day have we warriors captured towns, while he lay safely in his huts, and we have brought home the spoils to him. And why must we make this war? The Trojans have done me no harm. Moreover, slaves are to be had for the capturing, and horses and tripods for the buying, but man's life, when once it is gone, you cannot buy back. My goddess-mother has told me that if I stay here and fight I shall never see again my native city or my old father, but shall die here. Tomorrow I will launch my ships on the salt sea, and if Poseidon grant me good journey, in three days I shall see home and clasp my father's knees. Phoenix, friend of my youth, come with me. Come and see the beautiful hills of Hellas again and the clear-flowing streams. My old father is waiting anxiously for your return and mine.

Phoenix. O Achilles, you make me sad, reminding me of your old father, my king, and of the beautiful hills of Hellas. And I should hate to be buried in this terrible Trojan land. I will go.

Ajax. Odysseus, let us go. We must tell the news to the Greeks, who now sit waiting. Achilles is a stubborn man, and his proud heart cares nothing for his comrades' love, though they worship him above all the other men among the ships. (*Ajax and Odysseus go.*)

ACT IV

(*Achilles and a companion are watching the fight from the Myrmidon camp.*)

Achilles. The Trojans are pushing the Greeks into the water! Fight, fight, all you Greeks!

Soldier. They are burning Agamemnon's ship!

Achilles. Where is Diomedes and his raging spear? I do not hear Agamemnon's hated voice. Only the war-cry of man-slaying Hector bursts around me.

Soldier. Ajax! Throw your spear, Ajax! (*Patroclus enters, running.*)

Patroclus. O Achilles, be no longer wroth with the Greeks. Be merciful unto them. All the bravest warriors lie in the hollow ship, smitten by spear or sword—Odysseus and strong Diomedes and kingly Agamemnon. And here sits Achilles, nursing his wrath!

Achilles. I will not go!

Patroclus. Pitiless that you are! Surely, Peleus is not your father, nor gentle Thetis your mother. Your father is but a sheer cliff, and the gray sea is your mother, so hard is your heart. May such wrath never take hold of me! But at least, send me forth in your place, and let the hosts of the Myrmidons follow in the hope of bringing some help to the Greeks, sore pressed as they are. Let me have your armor to buckle upon my shoulders, so, perhaps, the Trojans will think that Achilles comes, and will fly, and the wearied sons of the Greeks may take breath.

Achilles. So it shall be! Fall on mightily and ward off destruction from the Greeks. Yet go not too far, lest the Trojans surround you. (*He prays.*) O far-seeing Zeus, lord of the thunder-bolt, hear me. Guard Patroclus in battle and grant that he may drive the Trojans far from the hollow ships. O mighty Zeus, strengthen his heart and send him safely back to me, crowned with victory. * * * Now haste, Patroclus, and may the gods help you! (*Patroclus goes.*) He looks like a great warrior. He will surely carry victory to the Greeks. How the Myrmidons crowd about him! They are hungry for battle.

Soldier. He is at the wall. How the Greeks wave their spears in welcome! The Trojans run from your armor, Achilles.

Achilles. And there is the arm of a man within the armor. How he lays on! Not so far, Patroclus! The Trojans will surround you. Hector comes! Beware! Your shield, Patroclus! Where are you? I can no longer see you, Patroclus. Patroclus, Patroclus! (*Messenger enters, running.*)

Messenger. O Achilles, I bring sad news concerning the man you love. Hector has killed Patroclus and is stripping him of his armor.

Achilles. Patroclus, Patroclus! Oh, ye bitter gods! Patroclus, Patroclus! Coward that I am! There he is lying on the cold ground, and I stand here. Patroclus, Patroclus! (*He runs out.*)

Soldier. Now, woe unto Hector, the slayer of the well-beloved Patroclus!

ACT V

(*Achilles enters from battle. Two soldiers follow him.*)

Achilles. Ah! I have had my revenge on Hector for killing Patroclus and many other brave Greeks. He shall no longer rage in battle. He shall burn no more hollow ships. He shall never have a great mound built over him, but dogs shall gnaw his bones.

First Soldier (to Second Soldier.) How fiercely burns Achilles' anger!

Second Soldier. I fear he will do shame to Hector's body.

First Soldier. He will never rest until he brings Priam low.

Second Soldier. But now we may win the battle, since Hector is dead.

(*Priam enters and falls at Achilles' feet.*)

Achilles. Who is this? Is it Priam, King of Troy?

Priam. So they called me once.

Achilles. How did you dare, old man, to come alone to the ships of the Greeks, and to meet the eyes of the man who has slain so many of your sons?

Priam. For Hector's sake I came.

Achilles. Speak not of Hector!

Priam. Think of your father, O Achilles. He is of the same years with me, on the pathway of old age. Yet while he hears of you as yet alive he rejoices in his heart, and he hopes day after day to see his dear son returning from Troy-land. But my Hector I shall never see again striding through the gates of Troy. Be pitiful on me, for I am longing for my dear son. Give him back to me!

Achilles. Nay, your Hector is dead, killed by my arm for the slaying of Patroclus.

Priam. Surely revenge will not follow into the land of the dead! I would only have his body, that we who loved him may weep over it. He was my well-beloved son. Think of your father's tears.

Achilles. Nay, sit here, and we will let our sorrows lie quiet in our hearts, for I am minded to give Hector back to you.

Priam. Now may the gods bless the mighty Achilles, who hardened not his heart against an old man's sorrow!

Achilles. And you would, perhaps, honor him with funeral games, and would cut down trees of the forest for his pyre, and would pile a great mound above him. For nine days I will hold back the army of the Greeks, that you may have your fill of mourning.

Priam. Now who would have thought that Achilles would do a favor to an old man with white hair? What lying man has called Achilles proud, and hard of heart, and unforgiving? Lo, he has poured out pity upon a sore heart.

PREPARATION OF AN EXERCISE ON HISTORICAL METHODS IN ARITHMETIC

This material was collected without any purpose of using it as a morning exercise. The Russian-peasant method of multiplying without the use of the multiplication table was first tried with the children of the fifth grade and on several adults. With Miss Hall's hearty interest to welcome it, the fifth grade visited the fourth grade and spent a period in demonstrating it to them. The interest the children showed was sufficient to encourage me to present the lattice method to the fifth grade. Each of these methods was used comparatively, the same multiplication being performed, first by the usual method, then by the Russian-peasant method, and thirdly by the lattice method. Each method tested the other methods. No pupil ventured to hand in work that did not prove. We improved in accuracy rapidly.

The children liked the work and asked for other methods of division. I showed them the scratch method or galley method. This forms an intermediate method between the short division and the long division. I believe it helped very materially in making plain the essential thought-work of division, which is the same in short division, scratch division and long division.

By this time the children began to expect that I could give them still other methods that would be as interesting and they asked for more. I showed them the method of multiplying by complements. I showed them a few magic squares, how to tell whether a number is divisible by 2, 3, 5, 9, or 10, without actually dividing it, and lastly I showed them the method of proof of all four operations by casting out the 9's.

Out of this interest and much willing practice, the children secured a large amount of familiarity with the number combinations and considerable skill in calculation.

It was at this stage that I proposed to them to make a morning exercise of it. They had already been telling their parents about the Russian-peasant method at home. I found some of them paying better attention in class when they realized for the first time that they could not go home and get father or mother to show them "how." It was necessary in preparation for the morning exercise to impress on them the need of speaking clearly, slowly, and of pointing to figures as they referred to them. The whole class was prepared, and any of them could have done any of the exercises. The day chosen for the

exercise was Friday, Jan. 3rd. The week before the holiday vacation, I gave a test to the whole class. All but about six had everything correct. I did not choose the best pupils to take part in the exercise. I chose those who, as I thought, needed it. They were definitely told the second school day before the exercise was given.

The day before the exercise and the morning of the exercise, I took the children to the assembly hall to get used to speaking in the large room. While the janitors were placing the chairs I had the weak whisperers try to speak above the noise and confusion, as Demosthenes did at the seashore. While they could not be heard half way across the room, it did them much good to test their voices under such conditions. They were in excellent good humor and mettle for the exercise.

The following is a report of the morning exercise as it was given.

Comparative Methods in the Fundamental Operations

Dr. Lukens. We are going to show you other ways of multiplying and dividing than the usual ways that are taught. It is not at all to be understood that these are offered as better ways, but they are interesting; they help us by comparison to understand better the usual ways, and they serve as a proof or test of the work by doing it in more than one way.

Theresa. First we are going to show you how the Russian peasant multiplies without using the multiplication table.

$$\begin{array}{r}
 45 \times 27 \\
 \hline
 22 \quad 54 \\
 11 \quad 108 \\
 5 \quad 216 \\
 \hline
 2 \quad 432 \\
 1 \quad 864 \\
 \hline
 1,215
 \end{array}$$

$$\begin{array}{r}
 27 \times 45 \\
 \hline
 13 \quad 90 \\
 6 \quad 180 \\
 3 \quad 360 \\
 1 \quad 720 \\
 \hline
 1,215
 \end{array}$$

The first column is obtained by taking successively half of the number above. The second column is obtained by doubling each number successively to correspond with the quantities in the first column. You then cross out every line that corresponds to an *even* number in the first column. You add the rest of the second column and thus obtain the product of the two numbers.

The first column is the *control*-column and has nothing else to do with the product. You do not add it. You take half of each number successively, rejecting any fraction, and writing only the whole numbers. Whenever the

control column has an *even* number, cross out the entire line. Add the remaining numbers in the second column. Their sum is the product of the original numbers.

Frederick and Jean then did another example, one by the Russian-peasant method and the other by the usual method, for comparison.

Janet. I am going to multiply 78 by 96, using the lattice method of multiplication.

The distinctive feature of the method is that you do not have to carry as you multiply, but only as you add up the diagonal columns.

Philipp and Elisabeth then did another example by both methods, for comparison.

As the time for the exercise closed we were asked to continue on a following day and give other methods. This was done as follows:

Dr. Lukens. The other day an explanation of the reason for the Russian-peasant method was asked for. The reason may be worked out by algebra, but not in this morning exercise. I can suggest it however. If you let n represent the second number, you can see how the control numbers determine which numbers in the second column to add. Thus:



LATTICE MULTIPLICATION

$$\begin{array}{r} \cancel{2} \times n \\ 1 \quad 2n \\ \hline 2n \end{array}$$

$$\begin{array}{r} 3 \times n \\ 1 \quad 2n \\ \hline 3n \end{array}$$

$$\begin{array}{r} \cancel{4} \times n \\ 2 \quad 2n \\ 1 \quad 4n \\ \hline 4n \end{array}$$

$$\begin{array}{r} 5 \times n \\ \cancel{2} \quad 2n \\ 1 \quad 4n \\ \hline 5n \end{array}$$

$$\begin{array}{r} \cancel{6} \times n \\ 3 \quad 2n \\ 1 \quad 4n \\ \hline 6n \end{array}$$

$$\begin{array}{r} 7 \times n \\ 3 \quad 2n \\ 1 \quad 4n \\ \hline 7n \end{array}$$

Halloween. I am going to use the scratch method of division in dividing 8,794 by 35.

The main point is to keep the columns correct. The divisor is written below the dividend, and the remainders above the dividend. Both are scratched as fast as they are used. Thus, 2 times 3 are 6, and 6 from 8 leaves 2, written above the 8; 2 times 5 are 10, and 10 from 27 leaves 17, written above the 27. The divisor is then moved over one place toward the right. Then, 35 is contained in 179 five times, and we say 5 times 3 are 15, and 15 from 17 leaves 2, written above the 7; 5 times 5 are 25, and 25 from 29 leaves 4, written above the 9. The divisor is rewritten one place



SCRATCH DIVISION

Janet then multiplied by complements. (See cut.)



MULTIPLICATION BY COMPLEMENTS

Lois then showed a magic square of 15. John proved an addition by casting out the 9's, Henry proved a subtraction and Mary a multiplication. Allan was in the midst of the proof of division by casting out the 9's when the closing bell rang.

PREPARATION OF AN EXERCISE ON THE GREAT ICE SHEET

A geography exercise was given by the fifth grade, comparing the present winter's snow sheet with the Great Ice Sheet of the Glacial Epoch.

The preparation of this morning exercise was radically different from that of the exercise on historical methods in arithmetic. Here I had already spoken to the children about the exercise a month in advance; told them what I proposed to have them do; and described



CUT-OUT MAP OF SNOW SHEET

to them the material I proposed to use. They had been chalking out on the floor map* the boundary of the winter ice and snow sheet as shown from week to week by the Ice and Snow Bulletin. I proposed

*The floor of the class room is covered with linoleum in which is worked out a map of the northern half of the western hemisphere from the equator northward on a scale of twenty miles to an inch. The map is tooled out, and boundaries, mountains, cities, etc., are marked by tack heads of different shapes and sizes. The water is painted in blue and drainage features in different colors. One use for this outline map is to chalk in temporarily any historical, scientific, commercial, or geographic data.

to them to use a large wall map for the morning exercise, with a cut-out flap to hang down from the top of the map to cover as much of the map as the snow did of the country. I proposed to them to make a comparison between the annual snow sheet and the Great Ice Sheet of geologic times and to point out clearly wherein they are similar, and just as clearly wherein they are totally unlike.

We proceeded with the preparation of the material and added a cut-out map of the snow sheet for each week through the winter.

We had no date assigned for the exercise until we were sure of the material. A sudden emergency, a few days later, that prevented the giving of a high-school morning exercise, offered us a date two weeks earlier than before had been chosen. We had but two days' notice of the change, but the weather furnished the setting that we needed. The snow sheet was still on the ground, the floods were attracting everyone's attention to the Ohio valley, and the snow was still nearly four feet deep in northern Michigan. The exercise given was as reported below.

The Great Ice Sheet

Mary. This weekly Snow and Ice Bulletin* shows the present winter's snow sheet. There are three places where the snow collects the deepest: Maine and New York, the northern peninsula of Michigan, and the Rocky Mountains. On March 18, in Maine the snow was 19 inches deep, in New York 3 inches, in Michigan 41 inches, and in the Rocky Mountains 14 inches. This printed part down below tells where the storms are, and this table tells how deep the ice is in the rivers.

Lee. The Great Ice Sheet came many thousands of years ago. The edge of the Ice Sheet was along the Ohio and the Missouri rivers. These (*pointing to diagram*) are the three great centers where the ice was thickest. This one is called the Labrador, this the Keewatin, and this the Cordilleran Ice Sheet.

There are many traces of the Ice Sheet around Chicago. One is the great granite boulders that the Ice Sheet brought down from Canada. On the rocks at Stony Island there are scratches and grooves that the ice made as it passed over that region. The terminal moraine is another trace. This moraine was formed of earth deposited at the edge of the ice. The edge of the Ice Sheet stayed for many years at the same place, and all the earth that was brought down in the ice collected there, and so that formed the moraine.

Halloween. This morning some of the fifth-grade children are going to take this winter's snow sheet in comparison with the Ice Sheet of long ago. The Great Ice Sheet was thousands of feet thick. This winter's snow sheet varies from inches to a few feet. These two charts show the extent

*Published weekly during the winter by the Weather Bureau.

and depth of this winter's snow sheet, and the extent and movement of the Great Ice Sheet at the period of its greatest extent. The farthest that the Ice Sheet ever came is right along here (*pointing to the diagram*).

When the snow sheet extends further than the Ice Sheet extended, it is not very deep.

Theresa. The material of both the winter snow sheet and the Great Ice Sheet that came long ago is snow. Thousands of years ago, at the time of the Ice Sheet, it snowed very heavily, and as it was always cold, there was no chance for the snow to melt, and that is how an ice sheet was formed. Here is a chart of the Ice Sheet. Here is where the snow sheet was melting back. On March 18th the snow had melted back quite a little. Down here in Texas is the farthest it came at any time this winter. In here there was an island of bare land with no snow on it. The first chart is for December 10th, and the snow came



MAP OF GREAT ICE SHEET

down only a little way over the Great Lakes region. You can see over here that Cape Cod was never covered with snow. Down in Texas it was not very deep, but the Great Lakes region was always covered. The places where it was deepest were in Maine, Northern Michigan and the Rocky Mountains. At places in the Rocky Mountains there is snow almost all the year around.

Carolyn. As the winter snow sheet retreats, the birds that have gone south come back, and the animals come back. The Ice Sheet retreated in the same way that the winter snow sheet does. When the Ice Sheet came, the birds went south too. As the Ice Sheet retreated, some plants came back and are still on their way north. Some of the trees and other plants that used to grow about here grow now in the Hudson Bay country. When the Ice Sheet retreated, the Ohio, the Mississippi, and the Missouri rivers were developed by the great amount of water from the melting ice.

Theresa. I forgot to say that the Ice Sheet and the snow sheet extend from the south pole in a similar way as from the north pole.

Lucile. This is a map of the United States, and shows the snow sheet for this winter only. (*This was a cut-out chart showing, by a series of cut maps lying one over the other, the weekly changes in the snow sheet for the present winter. See the first cut in this article.*)

Allan (*pointing to the Ice Sheet Map*). The Ice Sheet, on the other

hand, lasted many thousands of years. Since it lasted year after year, it grew much thicker than the snow sheet that lasts only for one winter.

Lucile (showing diagrams). These curves show the depth of the snow in the Michigan Peninsula, in Colorado, and in Maine, from week to week throughout the winter.



CHART SHOWING DEPTH OF SNOW

Allan. The immense thickness of the Ice Sheet made it flow because the pressure of the ice pushed it out from the middle, and it flowed in all directions, and while it flowed it grew thicker. It would go over mountains and take the top off and carry the earth and boulders and dirt and things and would pile them up in the valleys, and make rivers and lakes. On our class excursions we have seen boulders that have come down from Canada in the ice.

Lucile. Instead of making lakes, as the Ice Sheet did, the snow melts

and leaves ponds and pools that last only a few days. The mud that has been mixed up with the snow covers everything outdoors, and the streets have to be cleaned, but the snow cannot carry the mud any great distance.

Allan. No plants could grow in the country covered by the Ice Sheet, and the animals could not get food, and they had to go south, and when it retreated, they came north again. This northward retreat is still going on now. There are lots of plants and animals that are away up in Canada now, whose ancestors used to be around here.

Lucile. Some birds and animals go south each winter when the snow sheet comes. There are plants, annuals, that are killed during the winter, but they come up again from the seeds. Others do not die out, perennials, and, when the snow goes, then the birds and other animals come north again.

Dr. Lukens. This completes our exercise, but there are some parts of it that did not come out, although most of the points we had in mind have been presented. It has been our intention for some weeks to have an exercise on the Ice Sheet before the snow went away from this region. The retreat of the snow sheet has presented itself this spring in a very striking way in Indiana, Iowa, and Ohio. The terrific catastrophe of this year is a vivid example of those that occurred as the Ice Sheet retreated. The comparison between the Ice Sheet and snow sheet is very suggestive. We do not find this enlarged upon in the books. The comparison that is enlarged upon by the geologists is between glaciers and the Ice Sheet. The latter is frequently called a glacier. Now, it differs just as radically from a glacier as it does from the snow sheet, and the difference needs to be understood. I have chosen this morning's exercise to show the neglected comparison between the snow sheet and the Ice Sheet. The essential difference is that the snow sheet does not flow as the Ice Sheet did. If you bear that one difference in mind you may think of the Ice Sheet as a great perennial snow sheet. The materials are the same and came in the same way, but the Ice Sheet lasted longer. This is the real cause of the difference. The Ice Sheet carried earth material with it, and with this it mantled the land and filled the valleys and scraped off the tops of mountains and blocked up valleys already there. This action of the ice in motion can be studied best by observing the glaciers of the present.

Halloween. I forgot to say that the seasonal climate changes here about every day or so, but in the days of the Ice Sheet the changes were by the thousand years—about a thousand years of bad weather and a thousand years of good weather.

Macaulay (sixth grade). Do you know when we will have another Ice Sheet?

Dr. Lukens. We must first know what caused this Ice Sheet. If we find out what caused that, we can probably say when it will return. The theories are so uncertain that it is better not to deal with them at all. The theory that has the most confidence at the present time, is that the variation of climate is due to the carbon dioxide in the atmosphere. The amount of carbon dioxide in the atmosphere determines its power to take and retain

the heat from the sun's rays as they pass through it. As the sun's rays pass through space no heat is taken, but as they reach the atmosphere of the earth, it acts as a net to catch and absorb the heat. Carbon dioxide increases very much the power of the atmosphere to absorb the sun's rays. A slight depletion in the amount of carbon dioxide in the atmosphere would suffice to produce a profound change of climate.

Miss Leubrie. What about the theory of the change of the axis of the earth?

Dr. Lukens. The axis of the earth is wobbling in a cycle of several thousand years, and this might account for the difference in climate. If the axis of the earth were more nearly perpendicular to the ecliptic, it would be much colder at the poles. We should perhaps have said that the greatest ice sheet at present is around the south pole—the ice sheet that has been explored by Shackleton, Ross, and Scott. That ice sheet covers the entire Antarctic continent. In the north, the greatest ice sheet is in Greenland. There we can study the ice sheet growing to great thickness in the interior. Greenland is without vegetation, except along the coast, the snow and ice covering the entire land.

Miss Leubrie. Wallace's "Island Life" is a classical work on this subject.

Miss Cooke. The melting of the snow sheet has brought about a great deal of suffering this year, especially to some of our neighbors in Indiana, Ohio, and Nebraska, and there has been a call from the United Charities for help. Men, women, and children are almost without clothing. Money also is needed. Bring tomorrow any help that you want to give, whether in clothing or money. I know, of course, that at Thanksgiving and Christmas you gave all the clothing you could spare, but perhaps some has accumulated since. The United Charities have facilities by which they can get things to places where needed.



PREPARATION OF AN EXERCISE ON THE AGE OF ELIZABETH

Seven cities claim the bones of Homer. In this book more than seven kinds of claims are made for the morning exercise as an aid to teaching. I wish to urge that there is no better means of teaching formal English composition. And when I have shown the opportunity it affords for study of introduction, conclusion, paragraphing, dignity and adequacy of vocabulary, unity, and so on, I must present an example, reported verbatim, which you can fairly say illustrates none of these points. However, I may ask fellow teachers to remember that the participants in a morning exercise can by no means be those who least need the training—who would, in other words, do creditably all they are expected to do; and that, however clearly a boy may know what the girl who is to precede him is going to say, and how he must join his paragraph to hers, he may fail to make the easy connection when his turn comes; and further, that such a failure is immeasurably preferable to his committing to memory what he plans to say, instead of speaking easily out of abundant information, even though we find that his performance falls far short of his promise.

This eighth-grade history class had spent two or three weeks on the Tudor period, especially the reign of Elizabeth. The same children had caught a faint glimpse of its literary glories by a careful study through many weeks of "As You Like It." They had presented two scenes from the play, in costume. They had all read parts of "Westward-Ho," and knew the daring of the English seaman, his scorn of Spain, his hot Protestantism. Some of the class had read "Kenilworth," and given the rest a picture of the splendor of the time. They had studied "The Revenge," and read selections from historical plays of Shakespeare which breathed the spirit of those days.

Elizabeth's reign interested different pupils in different ways, but they could all see that an exercise of this type, to be effective, should have one unifying idea. Everyone had a suggestion as to what this idea should be, and they settled upon "The pride which the Englishman of that day had in his country." Then everybody made an outline. I need scarcely mention that children making such a plan

feel that it is their enterprise, and that their best energies are engaged to make it of value. In this frame of mind they readily evolved the idea that an exercise with a dominant thought must at the outset arrest the attention of the audience with a vivid presentation of that thought; also that one way to conclude such an exercise is to remind the audience of that first impression, and send them away with the unifying idea uppermost in their minds. When they had adopted these two principles, I could trust to them for suggestions for a good introduction and an effectively resumptive ending. In the exercise in question, the selections from historical plays came to their aid, but of course that is a rare occurrence.

Then as to paragraphs. A change of speaker in the exercise corresponds to a new paragraph in a theme. Eighth-grade pupils have few occasions to write any composition of sufficient length to enable them to practice paragraphing adequately, just as the brevity of their ordinary compositions precludes their using careful introductions and conclusions. From such an exercise as this, planned so that each speaker treats a new aspect of the subject, they acquire a working knowledge of the principle of paragraphing.

A third principle of composition also is made necessary in an exercise of this type. Every speaker, while introducing a new branch of the subject, must avoid making his transitions too abrupt. Reading of a good prose model shows that careful writers avoid such abruptness by the repetition of a word or phrase from the preceding paragraph, or by a connecting word, like *such*, *but*, *however*, or some other device. Each participant was expected by the class to plan his transition. He was expected also to keep the vocabulary of his paragraph up to the standard set by Shakespeare in the introductory reading, and this modest demand he did his utmost to meet. The exercise follows:

The Age of Elizabeth

Estabrook (reading).

This blessed plot, this earth, this realm, this England,

* * * * *

This royal throne of kings, this sceptered isle,

This earth of majesty, this seat of Mars,

This other Eden, demi-paradise,

This fortress, built by nature for herself

Against infection and the hand of war,

This happy breed of men, this little world;

* * * * *

This blessed plot, this earth, this realm, this England.

* * * * *

This England never did, nor never shall,
Lie at the proud feet of a conqueror,
But when it first did help to wound itself.
Now these, her princes, are come home again,
Come the three corners of the world in arms,
And we shall shock them. Naught shall make us rue,
If England to itself do rest but true.

Elizabeth. Shakespeare, who wrote the lines Estabrook has just read, was the greatest writer of his time. He lived in the days of Queen Elizabeth, and tried to express for the men of his time their boundless love for England and their pride in it. The Englishmen had reason to be proud, for Spain had been the leading power of the world, and they had defeated the Spanish Armada and made England mistress of the seas. This great struggle was brought about by a number of causes. England was almost without exception Protestant, and Spain was entirely Catholic. The English had been helping the Protestants in France and the Netherlands, which made Spain very angry. Then the English had been doing a great wrong by cruising in the Spanish Main, and capturing richly laden Spanish galleons from the Indies. Also, Mary Queen of Scots left her claim to the English throne to Philip of Spain, which made him resolve to conquer England and make himself King. So he got ready his ships, and after three years of careful preparation the greatest fleet the world had ever seen sailed out of the Spanish harbor toward England.

England had had a long period of peace, and was poorly supplied with ships and men, but as soon as she heard of Spain's plan she gathered all the old vessels she had and fitted them up as best she could. Lord Howard was made commander, and he and his men had hope and confidence and were willing to sacrifice themselves for their queen.

The Armada was first sighted off the coast of Plymouth, sailing in a crescent of a hundred and forty ships. The small English fleet of seventy ships immediately started out in pursuit. They gained rapidly on the Spanish fleet, and soon were close enough to fire upon them. The Spanish at once fired back, and a fierce battle ensued, in which both sides showed great courage. The English had the advantage, for their ships were so light and swift that they could dodge the shots of the Spaniards, while the Spanish ships were so big and top-heavy that they rocked violently, so that the shots went far up into the air. That day the English shot off 500 cannon, while the Spaniards thought they were doing wonders in shooting eighty. This indicates that the English were more practiced in the navy. The Spaniards had foolishly crowded their ships with inexperienced noblemen who had little idea of how to fight, while the English had put as few men as possible on board, and these men skilled in battle. When the Spaniards saw that the English were defeating them, they lost their courage and hope, and sailed toward France, to take refuge in the harbor of Calais. There they had planned to meet a Spanish duke with a trained army.

If the English had not kept their eyes upon them, the Spaniards would probably have landed on the shores of England and a battle on land would have followed, but at midnight the English sent four fire ships into the harbor to destroy the Armada. The men were all on shore, and when they heard of what was going on they were horrified and flew to their ships. The next morning, almost half of the Spanish Armada was destroyed and another terrible battle followed. As soon as the Spaniards could escape they tried to get back to Spain around the northern coast of England, but a terrible storm arose, and nearly all of the ships were destroyed. The English, also, were almost starved to death before they could get back to England to tell of their joyful victory.

Macaulay. The English at the time of Elizabeth were great sailors and fighters. This is proved in such a case as Sir Francis Drake, who was the first Englishman to go around the world; so also in the case of Sir Walter Raleigh, who was a great fighter and sailor. A good example of the character of the English sea captain of that day is shown in Sir Richard Grenville, captain of the "Revenge." The Revenge is the little English ship that all but defeated fifty of the great Spanish men-of-war. The "Revenge" is well known to most of us. Lord Tennyson wrote it. I am going to read some passages in which Sir Richard speaks to his men:

"Shall we fight, or shall we fly?
Good Sir Richard, tell us now,
For to fight is but to die.
There'll be little of us left by the time this sun is set."
And Sir Richard said again: "We be all good Englishmen.
Let us hang these dogs of Seville, the children of the devil,
For I never turned my back upon Don or devil yet."

This shows the great hatred that the English had for the Spaniards. It also shows the good fellowship that existed between the English officers and their men. On the Spanish ships the men were divided into three classes—sailors, gunners, and officers. The sailors were treated very cruelly. The gunners were most of them foreigners, and the officers knew no fighting but to draw the sword. The next passage is where they fought a day and a night:

But Sir Richard cried, in his English pride,
"We have fought such a fight for a day and a night
As may never be fought again.
We have won great glory, my men;
And a day less or more,
At sea or ashore,
We die—does it matter when?
Sink me the ship, Master Gunner,—sink her, split her in twain;
Fall into the hands of God, not into the hands of Spain."

This shows the great pride that the English had; they would rather sink their own ship than surrender to the Spaniards and have them boast that they had done it. Sir Richard Grenville wanted to sink the ship, but the

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at the end she grew to be very unpopular, partly because her old friends had died, and partly because the younger citizens did not understand and like her methods of government, which were not then necessary because she had used them so successfully. This is a prophecy which Cranmer made at the christening of Elizabeth in Shakespeare's play of "Henry VIII":

"This royal infant—heaven still move about her!—

Though in her cradle, yet now promises
Upon this land a thousand, thousand blessings,
Which time shall bring to ripeness. She shall be
A pattern to all princes living with her,
And all that shall succeed; Saba was never
More covetous of wisdom and fair virtue
Than this pure soul shall be. All princely graces
That mould up such a mighty piece as this is,
With all the virtues that attend the good,
Shall still be doubled on her; truth shall nurse her,
Holy and heavenly thoughts still counsel her;
She shall be loved and feared; her own shall bless her;
Her foes shake like a field of beaten corn,
And hang their heads with sorrow; good grows with her.
In her days every man shall eat in safety
Under his own vine what he plants, and sing
The merry songs of peace to all his neighbors.
God shall be truly known; and those about her
From her shall read the perfect ways of honour."

—*Henry VIII, Act V, Scene V.*



PREPARATION OF AN EXERCISE ON CICERO

In working on the orations of Cicero, with the Junior class, one of the unspoken hopes of the teacher was that the subject-matter of the orations, or the allied topics of the political life, oratory, and character of the great men of Cicero's time, would inspire the class to evolve a morning exercise that could be given to the pleasure and profit of the School.

It was the general opinion of the class, on finishing the four orations against Catiline, that there was material for an exercise which could be so simplified as to be interesting to even the fourth-grade children.

The students were asked to work out plans for the exercise, and two periods were spent in discussing these outlines and in the organizing and illustrating of the material.

Many felt, however, that three exercises, one, depicting the life of the Romans at that time, another, giving a glimpse of Cicero, the statesman, and a third, presenting the big civic questions involved, would be necessary in order to give an adequate setting for the orations.

The pupils themselves selected the passages from the orations that would best present their respective topics in the six minutes allowed to each speaker; they made their own translations and planned the staging of the senate scene, keeping in mind the need of adapting the presentation to the younger children as well as to the older students and faculty. The class was assisted by the art department in designing the costumes and in arranging the setting, and by the teacher of oral expression, in the rehearsals of the orations.

Below are given specimens of three tentative plans prepared by the students, and the material in full of the accepted plan as it was presented in the morning exercise.

Plans for Two Morning Exercises—(Lucy)

I

- A. Story of Founding of Rome
 - 1. Map of Seven Hills
 - 2. Slide of Statue of Romulus
 - 3. Slides of Principal Buildings

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- B. Situation of Rome
- C. The Forum
- D. Roman Character
 - 1. Physical
 - 2. Moral
- E. Roman Customs
 - 1. Triumphal Processions
 - 2. Feasts, Vestal Virgins and Other Affairs of Religion
 - 3. Social and Domestic Life
 - 4. Occupations
- F. Roman Government

II

- A. Conspiracy of Catiline
 - 1. Cause
 - 2. Plans
 - 3. Followers
 - 4. Character of Catiline
- B. First Oration of Cicero
 - 1. Circumstances
- C. Deliver Part of First Oration (in costume)
 - 1. Represent Part of Senate House on Stage
 - 2. Enter Catiline
 - 3. Other Romans Move Away
 - 4. Cicero Rises and Delivers Oration (condense)
- D. Deliver Part of Second Oration (in costume)
 - 1. Explain Circumstances

Plan for a Morning Exercise—(Frances)

- I. Introduction
 - 1. Statement of Political Affairs at Rome
 - 2. Steps by Which the Conspiracy Grew and a Brief Outline of Cicero's Life Up to November 8, 63 B. C.
- II. Short Reading from First Oration
 - 1. Catiline's Effrontery in Coming to the Senate
 - 2. Cicero Urges Him to Join His Confederates
 - 3. Every Citizen Must Work for Good of State

(Run on screen a picture of Temple of Jupiter Stator, and tell why Senate met there.)
- III. Short Reading from Second Oration
 - 1. Catiline Gone from Rome
 - 2. Character of His Followers
 - 3. Warning to Conspirators and Encouragement to Loyal Men.
- IV. Short Reading from Third Oration
 - 1. Events Before Oration
 - 2. Story of the Arrest, Witnesses. Proofs, Confessions
- V. Short Reading from Fourth Oration
 - 1. Events Before Oration

2. Bring Out Way Cicero Argues Indirectly for Immediate Death

VI. In Few Words, Cicero's Life from This Time to His Death

Plan for a Morning Exercise—(John)

The orations of Cicero which we have read, give us, beside the treatment of the conspiracy, information on the three following subjects:

I. The Character of Cicero and His Ability

1. Egotistical
2. Patriotic
3. Far-sighted
4. Great Powers of Oratory
 - a. Style

Similes and Other Figures of Speech
 - b. Reasoning, Logic

Manipulation of Words and Ideas to Bring People to His Own Views

II. The Classes of People and Their Character at That Time

1. Senators
 - a. Inclined Towards Despotism
2. Knights
 - a. Striving to Gain Equal Footing with Senators
3. Common People
 - a. Led by Senatorial Leaders
 - b. Mostly Ignorant
 - c. Superstitious
 - d. Loyal

III. Buildings of Rome, Especially in Forum

1. Curia Hostilia
2. Carcer
3. Basilicae
4. Tabularium
5. Temple of Saturn

Note.—My idea in presenting this exercise is to support these points by translations from the orations.

Morning Exercise as Given

Note. This accepted plan, which aims in its introduction to give a brief picture of Rome in 68 B. C., and a setting for the orations, is, as stated before, a composite that grew from the class discussions.

Josephine. At the close of the Punic wars, over two thousand years ago, Rome was practically the mistress of the known world, but was no longer the ruler of her own destinies, for great extremes of wealth and poverty had arisen. The prosperous commercial cities had disappeared; and the simple middle-class farmer had been forced to give up his home and take refuge in Rome, becoming one of the uneducated mob which had nothing to do but to lie about the streets and fall a prey to unscrupulous politicians. Instead of small farms, great estates spread over all Italy, which were owned

by the wealthy Roman nobles and worked by slaves. The only roads to power were wealth, birth, and the command of an army. Yet in this time of license there lived a man, Marcus Tullius Cicero, a man of no great wealth and not a noble, who, by his brilliant oratory and unusual administrative ability, was able to gain the consulship, the highest office in Rome, and to crush the great conspiracy of Catiline, which aimed, not only to overthrow the government, but even to destroy the city. In Rome, for several centuries, oratory had played a very important part in the life of the people—much more, in fact, than it does today. In Rome, most of the voters lived in the cities, and there was no farming class, as in our country, liable to maintain the equilibrium between two parties in the political strife. The voters, a small minority of the populace, would gather around the orator, who addressed them in the central part of the city, in the forum. Questions were submitted to the people to vote upon, and matters were not decided by the representatives of the people, as they are today, but by the voters themselves. It was here, as a lawyer, before his consulship, that Cicero won a great many important cases. Some of his most notable speeches were those in defense of Roscius, and the Phillipics against Verres. Aside from Cicero's argumentative power, he possessed a great influence over the minds and feelings of his audience, because of his attractive personality. He had a tall, impressive figure, and a strong, sweet voice. In fact, when other lawyers were arguing on the same side of a question with Cicero, it was usually Cicero who was the last one to address the judges, because of the good impression he always made. We know of over one hundred orations that he actually delivered. Fifty-seven of these we have intact, and parts of twenty-four more. But perhaps the most famous and most widely read of all Cicero's orations are those against Catiline.

This Catiline was a nobleman of unusual ability, and he was endowed with the rare quality of being able to attract people to him. Yet all of his talents and intellect were wasted because in his youth he had always gone to every excess, and this had blunted his moral sense. So, when he had quickly spent his fortune in trying to retrieve his losses, he was led into a series of crimes that were almost beyond belief.

Catiline was one of Cicero's opponents in the candidacy for consulship but was beaten three times, and Cicero was elected. Catiline was so furiously indignant that he immediately resolved upon revenge. So he gathered about him a band of spendthrifts, criminals and notorious leaders of the city mob, who were always ready for bloodshed and excitement. With these men he planned the murder of all the leading men in Rome, the overthrow of the government, the destruction of the city, if that were necessary, and then to make himself ruler. So he straightway gathered an army and supplies in the northern part of Italy, and left them under the command of Manlius, one of his friends, while he himself remained in Rome to watch operations there.

On the evening of the 6th of November, Catiline called a meeting of his followers at Laeca's to complete arrangements for the murder of the citizens. But Cicero had kept careful watch of all of Catiline's plans, and that very evening his friends came to tell him of the great danger. So two days

later, the 8th of November, Cicero called a meeting of the Senate in the Temple of Jupiter Stator, and planned to present to the senators the danger that surrounded them, and to make arrangements for active defense. But when Cicero perceived that Catiline had had the audacity to come to his usual place in the senate, when he knew that he had planned the destruction of every man assembled there, Cicero was so furious that, instead of proceeding with the business as planned, he burst out into a fiery oration, and showed Catiline, step by step, that all his plans were known. This oration John will now give.

(Curtain rises.)



CICERO'S ORATION AGAINST CATILINE

John. How long, pray, Catiline, will you take advantage of our patience? How much longer will you continue to mock us? To what lengths will you go in your unbridled audacity? Have not the nightly guard on the Palatine, the garrison of the city, the rallying of all loyal men, the meeting of the senate in this strongly fortified temple, the expressions on the countenances of these men moved you at all? Do you not see that your conspiracy is laid bare? Do you not realize that it is held fast bound by the knowledge that we all possess? Who of us, do you suppose does not know what you did last night, the night before, where you were, what men you assembled together, what plans you had made? Alas, the times, the customs! The senate knows this, the consul sees it; nevertheless, he lives. Lives, do I say? Yea, more, he comes even into the senate; he takes part in public affairs; he silently marks every man of us for slaughter.

You ought to have been put to death long ago by the consul's order, Catiline; long ago you ought to have received the destruction which you are

now plotting against us. Did not Publius Scipio, a most distinguished man, Pontifex Maximus, put to death Tiberius Gracchus, who was only desirous of a change of government? Shall we, the consuls, allow you to live, who wish to destroy the whole world with fire and sword? There was once,—there was once a time, when loyal men thought that a dangerous citizen should be more severely punished than the most hostile foe. We have a severe and weighty decree of the senate against you, Catiline. We do not lack evidence nor the authorization of the senate, but we, I say it openly,—we, the consuls, are at fault. You live; and you live not to give up, but to persist in your bold acts. Senators, I wish to be lenient; I do not wish to be lax at this time of danger to the state—but now I condemn myself for my inactivity and negligence. A camp in opposition to the Roman people has been pitched in the mountain passes of Etruria. The number of the enemy increases daily. We see the general, the leader of that camp, within the city walls, even within our senate, daily plotting the destruction of the state. But, Catiline, you will be put to death when no one so wicked, so desperate, so like yourself, can be found who does not admit that the deed was justly done. As long as there is any one who dares defend you, you will live; and you will live just as you are living now, surrounded by my numerous strong guards, so that you will not be able to make a single move against the republic. Review with me what you did night before last. You will see that I have been much more watchful for the safety of the state than you have been for its destruction. I say that you went into the scythe-maker's quarters—to be plain—to the house of Marcus Laeca. There you assembled many of your mad followers. Do you dare to deny this? Why are you silent? I will prove it, if you deny it. Ye immortal gods! Where in the world are we? In what city do we live? What kind of a republic is this? Here, amongst the senators, in this most august and sacred body, are men who are plotting the destruction of us all, of the city, and even of the whole world. While you were at Laeca's that night, Catiline, you portioned out the whole of Italy. You chose the men whom you would leave at Rome, and those men you would lead out with you. You marked out the parts of the city that were to be fired, and said that you would set out from the city, but that you were delayed a little because I was still living. Two of your friends were found who promised to relieve you of that care and to kill me early in the morning. I heard of the plan, and saved myself by placing guards around my house. Can the light of day, or the air we breathe, be pleasing to you, Catiline, when you know that there is no one here who is not fully aware that December 31st you got together a band of men to kill the consuls and the chief magistrates of the state, and that not a change of mind or fear deterred you, but the fortune of the Roman people? A little while ago you came into the senate. Was there any one of this great number of men, of all your friends and relatives, who greeted you? Since this is the first time in history that this has happened to anyone, are you waiting to be insulted openly, when their silence shows the contempt in which they hold you? What of this,—that at your arrival these seats became vacant; that all men of consular rank, as soon as you sat down, left

that part of the benches empty? And in what spirit, pray, do you think you ought to bear this? By heavens, if my slaves feared me as all your fellow citizens fear you, Catiline, I should leave my home. Go out from the city, Catiline; relieve the state of its fear; set out into exile, if you are waiting this word. What is it, Catiline? What are you waiting for? Do you not perceive the wishes of these men by their silence? They desire it—they are silent.

Now, senators, that I may avert a certain just complaint of the fatherland against me, listen carefully to what I have to say, and let my words sink deeply into your hearts and minds. If the fatherland, which is much dearer to me than life, if the whole state should speak to me and say: "Marcus Tullius Cicero, what are you doing? Will you allow that man, who you know is an enemy, who is to be the leader of the war against us, who has aroused the slaves and desperate men against the state, to go out of the city unpunished? Will you not rather order him to be thrown into prison, and to be put to death? What hinders you from doing this? Is it the customs of your ancestors? Is it the law? Do you fear unpopularity in the future?" To the sacred words of the republic and to the men who think this, I would answer briefly. If I thought that this were the best thing to do, senators, I would not allow that ruffian to live one hour longer, but would put him to death. But many men, not only wicked, but even ignorant men, would say that I had acted cruelly and tyrannically if I should punish him. Now I know that if he goes to the camp of Manlius, as he intends to do, there will be no one so stupid as not to see that a conspiracy has been formed; no one so wicked as to not admit this. I know that, if he alone is killed, the danger will be averted for awhile, but will not be stamped out for all time. But if he should lead his wicked followers out with him, not only would this fully developed conspiracy be wiped out and destroyed, but even the root and seed of all evil.

I promise you, senators, that the consuls will be so diligent that you will have so much power, that there will be such a united and harmonious spirit among all Romans, that on Catiline's departure you will see all things laid bare, brought to light, punished.

Wilt thou, Jupiter, whom we have truly called the guardian of this city and empire, keep this man from thy temples, the homes of the city, the possessions of the citizens? And wilt thou punish this man, leader of the enemy, the foe of the fatherland, a plunderer of Italy, while in life—and even after death—with eternal punishment?

(*Curtain falls.*)

Josephine. When Cicero had ceased speaking and sat down, Catiline at first attempted to reply to the proofs of his guilt, but he was hissed down by the senators. Seeing, then, that he was really in danger, he left the temple, and, fleeing from the city, that night went to the camp of Manlius in the northern part of Italy, on the pretense that he had gone to Massalia for his health. During the month that ensued Cicero kept careful track of all the plans and movements of the conspirators who were left behind in the city;

and finally, by getting possession of a letter written to Catiline by Lentulus, Cicero felt that he had sufficient evidence to warrant the arrest of the four chief conspirators who were then in the city. The following day he called a meeting in the temple of Concord to justify himself in the eyes of the senators for having arrested the conspirators. As he left the senate house people crowded about and clamored to know what was going on. So Cicero addressed them, and, going over much the same ground that he had that morning in the senate-house, he showed them, step by step, Catiline's acts and the guilt of the conspirators.

We should like the School to imagine that they are the Roman people, assembled to listen to Cicero's proofs as he gave them from the rostrum in the Forum.

(Curtain rises.)

Frances. Fellow citizens! Today you see this far-famed republic, this most glorious city, yourselves, your wives, your children, snatched from the very jaws of death, preserved and restored to you by my diligence, counterplots, and wisdom, and through the great love of the immortal gods for you. For I have quenched the fire that was threatening this city, these temples, and your homes, and have turned aside the sword of disaster from your throats, and have lifted the yoke of servitude from off your shoulders. I shall tell you briefly how I discovered, prevented, and finally disclosed in the senate today this great conspiracy.



CICERO ADDRESSING PEOPLE

In the first place, when I drove Catiline into exile, I thought that his followers would be too weak without him to do any serious harm. Nevertheless, I have kept a constant watch over them, and know everything that they have done or even contemplated. I discovered that legates were being sent into Gaul to incite the provincials to war, and that Volturcius, one of the conspirators, had joined himself to this party with letters and verbal directions to Catiline. Accordingly, I knew that the time had come when I must prove to you and to the senate the perfidy of Catiline and of his followers. I confided the plot to two praetors, Flaccus and Pomptinus, and told them what I thought should be done. Being most loyal and devoted adherents to the state, they asked no further questions, but each procured a force of strong and loyal men; and, without arousing anyone's suspicions, they hid themselves in the farm-houses on opposite sides of the river Tiber, near the Mulvian bridge. Early in the morning, when the troupe of legates, with Volturcius, crossed the bridge, they were attacked and easily captured. The despatches to Catiline, with seals intact, were seized and handed over to me. I immediately called a meeting of the principal men of

the city, and also summoned the four conspirators, Gabinius, Statilius, Cethegus, and Lentulus, who came, suspecting nothing. I was advised to open the despatches privately, so that in case nothing of importance was found, I should not needlessly alarm the senate. But I decided to call the senate together and lay the whole matter before them. In the meantime, I sent a praetor to search the house of Cethegus. He discovered a great number of swords, daggers, and other weapons hidden there. When the senate had assembled, Volturcius turned state's evidence, and I bade him tell all he knew without fear of the consequences. When he had partially recovered from his fright, he said that he had been given letters and verbal instructions from Lentulus to Catiline to the effect that Catiline should make use of the slaves and should hasten to Rome with an army as soon as possible. His plan was to attack the city from all sides, to set fire to the buildings, and to slaughter all the citizens. When he had finished, I brought in the Gallic legates, who reported that they had been given letters to their tribes by Lentulus, Cethegus, and Statilius, which said that they were to send great numbers of infantry and cavalry into Italy as soon as possible.

At last I brought in the despatches. I showed them to Cethegus, and he acknowledged his own seal. I opened them and read. I found that the contents were indeed what the Gauls had said. Then Cethegus, accused of concealing weapons in his house, replied that he had always been an admirer of good steel. However, when the despatches were read aloud his conscience smote him, and he remained silent. Statilius was then brought forward. He acknowledged his seal and handwriting, and, after the letters had been read, confessed his guilt. Then I showed the tablets to Lentulus, and asked him if the seals were his. He bowed his head in silence. After all his letters had been read, I gave him permission to speak, if he so desired. At first he vehemently denied all the accusations against him, but when all the evidence had been brought forth he suddenly leapt to his feet in anger and indignantly demanded of Volturcius and the Gauls what dealings they had with him. When they had answered briefly and consistently, and told how often and why they had come to him, then he, though maddened by crime, suddenly showed how great is the force of conscience. For, contrary to the opinion of every one, he confessed his guilt. Lastly, Gabinius was led in, and, though he answered arrogantly at first, he soon succumbed to the crushing weight of evidence, and he, too, confessed.

And in my opinion, not only all the evidence, the letters, the seals, the handwriting, and the confession of each man, seemed proof enough of their guilt, but their stealthy glances at each other, their shifty eyes, their guilty color, their sullen silence, seemed to me to prove their guilt and convict them absolutely. After all the evidence had been arranged and put in legal form, I asked the senate what they thought advisable to do. The leading senators proposed very severe sentences against the criminals, and these measures were unanimously adopted by the rest of the senators. They decreed a vote of thanks to me for my untiring efforts in the matter, and also to the two praetors who had conducted themselves in such a worthy manner. As for the conspirators, they were cast into prison to await sentence.

O, fellow citizens, as to the future safety of the state you need have no fears now. Since Catiline has been expelled from the city, the rest of the conspirators are helpless, for Catiline was the chief—aye, the very backbone of the conspiracy. He attended to everything himself, trusted no man to carry out his plans, and has proved himself an enemy to be feared.

And now, fellow citizens, give thanks to Jupiter, the guardian of the city, and depart for your homes. I promise that in the future my efforts will be as great and untiring as they have been in the past. My reward for my services will be that you will always remember them, for I care for no outward signs of fame. Rejoice, then, in the safety of the state, and thank the immortal gods that they have given me such wisdom and that they have kept the city from harm.

Note. The translations, given above, with the exception of a few corrections by the teacher, are the work of the pupils.



EXERCISES REPORTED VERBATIM

Play Houses and Primitive Homes

A Nature Excursion

A Study of Bridges

The Chemistry of Water

A Series of Exercises on Illumination

A Series of Exercises on Pottery

PLAYHOUSES AND PRIMITIVE HOMES

The morning exercise was the result of experience gained through the study of providing shelter under varied conditions. After the children had described their own homes and others which they had seen in travels or in books, the environment of the tree man was made vivid by blackboard drawings and stories of forests and animals. The cave man's surroundings of cliffs and rocks were presented in the same way. The background of the Indian and his wigwam was made clear



FIRST GRADE HOUSES

by means of stereopticon views of plains and mountains. The setting for the Eskimo and his home was made more realistic through descriptions of Arctic country and climate.

After the children had studied some of the ways and means of making homes, they went one day to the woods, and while there they made a brush house. When they returned, some of the children wished to make another brush house in the playground, others suggested digging caves, and still others wanted to build a brick house. Since a portion of the garden was given to them for their own use, they were able during their play period to carry out the plans that they had suggested.

In making the brick house, the children used old bricks at first, and then others were bought. They dug the sand from a neighboring

lot. In laying the bricks there was constant practice in making surfaces level and straight. Judgments had to be made as to the size of bricks and as to the quantity of cement used; also the amount of water necessary to make the cement. The problem of making the cement stick was worked out by experimenting, by observing brick-laying, and by questioning people who understood the work. The children found out that when all conditions were met, the bricklaying was well done, but if any condition was neglected, the results were poor.



BRUSH HOUSE

The problem of the cave men, as the young diggers called themselves, was to get their cave deep enough to prevent the top from falling in. An ingenious man, however, would frequently put boards over his excavation and cover them with dirt, or if he succeeded in making a tunnel only six inches in length from one cave to another he was wild with delight, and felt that he had been successful. One child who was very self-centered wished to work alone in his cave. His cave grew deeper, and the earth harder, and the work more difficult until one day he saw a pickax in the tool shed, and using it, found what a help it was to him. Then he went around and helped the other cave men and saw how much more two could do than one. Soon after this he came in from work and said, "I have taken a partner." There were times when these cave men threw stones and dirt like their fore-

fathers, but gradually there grew a spirit of co-operation, and the right feeling came about without outside influence.

The difficulties found in making the wigwam and the snow house were clearly presented by the children in the following exercise.

Morning Exercise—Houses

First Grade Teacher. For four years the children of the first grade have been making houses out in the woods and in the garden, and this morning they are going to tell you something about their work. The older children, who have been in the first grade and have done this work, will also tell you of their experiences.

Note. The children chose the particular work they wished to talk about, and through their choice they naturally divided themselves into groups. When the exercise was given, the stereopticon pictures of the different types of shelter were thrown upon a screen, and as these pictures appeared, every group in turn went up and sat upon the floor of the platform. Each child then stood and told of his part in the work, and when all the group had finished, they again took their seats in the audience.

Ruth (third grade). When the third grade were in the first grade, they went out into the woods on an excursion and came to a place where some vines were hanging from some trees in the shape of a nice little house, but on one side there were no vines, so we thought we would bring some leaves and make a nice house of it. We began doing it, and we pretended it was going to rain, and we must work faster. We did work a little faster, and after a while, when it was almost done, it did begin to rain, and we crowded into the house.

Caroline (third grade). When we came home we thought we would make a brush house in the garden. We brought the brush from where the flat building is now standing. When that was all taken away, we brought more brush from an old tree that had fallen down in front of the School. When it was all done a hard rain came and knocked the roof off.

Elizabeth G. (second grade). When we were in the first grade, we went to Glencoe and found a brush house that the third grade had made when they were in the first grade, and we thought we would fill up the cracks. So we went out into the woods and found leaves and sticks and brought them back and put them in the cracks. We found vines and wove them between the cracks, and when it was finished we thought it nice and cosy.

Robert B. (second grade—pointing to a drawing in crayon on the board). I drew this picture. Here is Mr. Mortensen and a few children. The rest of the children have gone to get their lunch, and Miss Walker and I are behind this tree. Mr. Mortensen built the fire, and the children are sitting around it eating and making believe they are Indians. The reason that we could not have a fire in the brush house was because we would burn it.

Robert H. (second grade). When we came back from Glencoe, we thought we would make a brush house in the garden. After Christmas we gathered up all the evergreen trees used for the Christmas decorations and stuck them in the ground. Then we took vines and wove them in and made a green house.

Mary (first grade). This year the first grade made a brush house, and we wove into it cornstalks and sunflower stalks and morning glory vines, and sometimes used cord and string. But the goats would run through it and break it down.



CAVES

Charles (first grade). The first of this year we were talking about a man and the kind of a place he could live in without using tools to build it. We thought he might live in a tree or in a cave. We thought it would be too hard for us to make a tree-house, so we made a cave. After we had worked a long time, I put my shovel down, and it went right through into the girls' cave, and we dug as hard as we could, and now we can go through.

Ward (first grade—holding up a ruler and measuring off the inches). The boys' cave is three feet and eighteen inches long, and the width of it is twenty-six inches. The widest place is one foot twenty-three inches, and the depth is sixteen inches.

Philip (first grade). I wanted to start a little cave, so I started, and I struck something hard, and I thought it was a big rock, and then I thought it was ice, and I called all the boys to help me get it out, and Jack threw in a shovel like a pickax, and we found that it was only frozen earth.

Margaret (first grade). When I was digging in the cave I saw a little toad in its hole, and just as I was trying to get him he hopped into the garden, and when he ran in I thought perhaps he would make a home there and stay until winter was over.

Roberta (first grade). Does anybody know whether there are any real cave men now or not?

Hermon (eighth grade). Yes, there are, in Africa.

Margaret (fourth grade). When the fourth grade were in the first grade they made a wigwam. They made it out of brown cotton flannel, and sewed it together with brown thread. They pretended that the pieces of brown cotton flannel were skins and that the thread was sinew. Then we took three poles and fastened them together and set them up in the garden. We took the brown cotton flannel and put it around the poles and left an opening for a door and a little hole at the top, so that we could have a fire in the wigwam, and the smoke could go out at the top.

Lisette (third grade). First, we made a clear space in the room to put

the material on the floor, and when we cut it out we found that there were some little pieces missing down at the bottom, and so we fitted in scraps. We went to the Field Museum, and we saw Indian wigwams there that had pictures on them. The pictures told the dreams of the Indians. A bow and arrow meant that they had dreamed of hunting. When we went home we thought it would be nice if we could make some pictures on our wigwam, so we painted pictures with bright colors. It was near Christmas, and our teacher thought it would be nice to make little Indian wigwams for Christmas presents. They were penwipers and they had pictures on them. Mine had stars, and a moon and some arrows on it. The stars and the moon meant that I had had a dream, and the arrows meant that I had been hunting.



WIGWAM

René (fourth grade). One day when the fourth grade were in the first grade, we had on our Indian suits and were out in the garden sitting around fire, eating parched corn. We got the corn out of our garden and parched in the domestic-science room. While we were eating the corn, we told stories. (*In the exercise, a typical story was told.*)

Peggy (third grade). When the wigwam was finished, we wanted some mats to sit on. We found some long grass, but as we could not weave it very well, it took quite a while to make mats big enough to sit on.

Allen (fifth grade). When I was in the first grade, we were studying houses, and some of us suggested making different kinds of houses. We talked about the kind of things our houses were made of, and one of us suggested making a brick house. First, we measured off the ground where we wanted the house, and then we dug a little ditch around the sides. In this we laid the bricks which served as a foundation. When we got it done, we



FIRST BRICK HOUSE

found that it was not on our land, so we had to tear it down. We used bricks that had been left from building the School.

Caroline (third grade). When we were in the first grade we started to build the second brick house. We had the bricks from the old one to play with, and we pretended the bricks were blocks, but somebody knocked down the walls we made, and we told our teacher, and she said, "It is your own fault, because you did not build it strong enough." And then we thought we



SECOND BRICK HOUSE

would have to use mortar. We used three cups of cement, and four of sand, and enough water to make it thick.

Ruth (third grade). I measured the second brick house, and it is 7 feet

8½ inches long and 7 feet 5 inches wide. The window is 1 foot 8 inches wide.

Elizabeth G. (second grade). Last year I helped to lay the brick floor. We leveled the ground, and then we put on sand and laid the bricks. After the floor was laid, we put down a board and placed the level upon it, and if the bubble was in the middle of the level, the floor was even. There were many cracks between the bricks, and we filled these with sand, and then cemented the floor.

Philip (first grade). Sometimes we laid one brick a day, sometimes two, sometimes three, and sometimes four. We worked hard on it. It takes a day and a half for a brick to dry. Sometimes when we have just laid a brick the children come around and knock it off, and sometimes the goats come through the window and walk on the wall and knock a brick off, too, and that makes more work.

Oehm (first grade). One morning we went out and found that a part of the brick house was broken down, and Leone and Jack and I stayed after school and all of us worked at recesses on the house, but it took a long time to mend the broken place. Then it was broken down a second time, and if it hadn't been broken down so many places we would have been building the roof now.

Elizabeth S. (second grade). I used to go out for about an hour after school and work on the brick house, and there were others in the group who worked, too. We had to soak the bricks in water over night; otherwise, in the morning, the cement would not stick. It took us a long time to find out what was the matter, and finally we thought we should try soaking the bricks, because if we did not do this the water in the cement would go into the bricks and leave the cement dry and crumbly.

Roberta (first grade). When we came to school in the fall we found that the brick house was too high to reach to the top of the wall, and we had to find high boxes to stand on, and it was not easy to climb up on them, and when we climbed upon them it was hard to carry the bricks and the sand and the cement and the water, and then we had to mix the cement up there. We found one box with sides about as thick as a cigar box, and we cut it into strips about four inches wide and about a foot long, and we used them for trowels.

Warren (second grade). When we were in the first grade we thought we would build a snow house, and so we rolled big snow balls that high on me (*holding his hand at his waist line*), about two feet, and we put them one on top of the other until they were above my head—about 4 feet. But we could not make a roof, and so we got a big sheet and spread it over for a roof, and we went in and had a lot of fun.

Robert S. (second grade). Last year, when we were in the first grade, we made a snow house, and we had trouble. First, it melted down; then we tried it again, and it melted again; then when it was colder, we tried again. We rolled snow balls until they were almost up to my shoulder, and began the walls of our house. Then we rolled others, but we found we could not have them so large, because we could not lift the big ones on top



SNOW HOUSES

of the others. This year we thought it would be fun to have a party for the first grade, so we built a snow house over in the park, and all of us played Eskimo games.

Ward (first grade). This year we thought it would be lots of fun to build a snow house. We rolled big snow balls in our own yard and used up all the snow. Then we had to go into the garden, and we rolled one big snow ball about three feet high, and we could not lift it. So Miss Reed and I rolled it over to the house, and we called a lot of boys, and they helped to lift it up, and we had to pack it in so it would not roll off the wall. I wore the Eskimo suit and pretended I was Boaz, the Eskimo boy.



A NATURE EXCURSION

We believe in studying nature out of doors. An eighth grade may go to dunes and lake ridges and ravines with the special purpose of studying physiography; a fourth or fifth grade may go to the same places to collect flowers, or to gather fruits for preserving; a first or second grade may seek there the geographical setting for stories of tree men or desert tribes. Often, all three of these purposes may combine, in varying degrees, in one excursion. Besides, there is always in the child's mind the added desire to have a good time, and in the teacher's mind the wish to found and foster in children a loving and intelligent interest in out-of-doors. Nature excursions have come to be one of the chief pleasures of our pupils. Yet these visits are far from being junketing trips. We go to answer, by original observations, questions that have arisen in class-room study, and to collect material for further work at school. The following exercise was given by a fourth grade after two visits to the sand dunes. These trips were made as the accompaniment to many weeks' study and simple experimentation in connection with soil formation. The children ground stones to make sand; pulverized rock and dissolved limestone to make clay; washed, sifted, and burned loam to find its constituents. The exercise may exemplify to a sympathetic reader the purposes of such trips, their relation to class-room work, amount of observation made in the field, the pupils' earnest attitude toward an excursion, the wholesome experiences and interests that it engenders, and the pleasure of the children in such a day in the open.

A boy. I am going to tell you how sand is made. Some sand that we found is made out of ground quartz. We looked at it through a microscope, and it looks like little pieces of quartz. Sand is of different colors, on account of the different colored stones that have been ground up by the waves. These are some stones that we found quite a way out in the lake that had been broken up. As soon as they are ground up smaller, the waves will wash them up closer to the shore. Here are some we found closer to the shore. They were ground up by the waves and washed up further. This is some sand that we found still nearer to the edge of the water.

*Ralph (eighth grade).** The present outlet of Lake Michigan is through

*This class was studying the topography of the Chicago region and was asked to contribute to our exercise an explanation of the presence of the sand in the dune district.

the Straits of Mackinac into Lake Huron, then through Lake Erie into Lake Ontario and the St. Lawrence River. When the glacier covered the lake, it had to have another outlet, and that was through the Sag into the Illinois river, and then into the Mississippi. The southern part of the lake was then much larger than it is now. The shore was twenty miles from the present shore, and as the glacier receded, the lake grew smaller at the southern end. As the water receded, it left different beaches. There are five or six of these different beaches between the old shore and the present shore, and it covered that whole country with sand.

Drummond. In Lake Michigan there is a current from the north. The sand that is made by the grinding up of the stones comes down with the current. The current is not strong enough to be noticed, but when there is a storm the waves raise the sand, and the current carries it along until it comes down to the southern part of Lake Michigan, and it is washed against the shore. The undertow carries some of it back, but there is another wave coming along, and that will meet the undertow. The sand will drop and make a sort of small hill or sand-bar, and after a while that bar keeps getting bigger and bigger until it comes to the surface, and then if there is a wind towards the shore, the sand will blow towards the shore, and if there is a breeze from shore blowing towards the lake, the sand from



the shore will blow to the sand-bar and make a dune there. After a while there will be water left on the land side of the dune, and the water will be stagnant there. After a while the water will evaporate, but the water from the lake will keep seeping through the sand under the dune into this marsh, because the bottom of the marsh is a little below the lake level. This apparatus shows how the water will go under the dune, because it always seeks its own level. Out in the yard, in the sand table, we made some sand dunes, and we made a lake around them and left a hollow in the sand. You can

look at it in the play period. The water has soaked through the sand and come to a level with the water outside.

Hugh. When we were at the sand dunes, we saw a log, and it was about half covered up with sand, and if the wind keeps blowing, it will be covered by a little dune. And Delia, one of the girls that went with us, put her hat down, and when we went to get up, it was almost covered with sand.

Leah (fifth grade). Out in the sand dunes, we saw a tree with its roots above the ground. (*Showing sketch.*) We think the sand must have covered it up this far on the trunk, and the roots came out of the trunk, and now that the sand has blown away, it has left the roots sticking out. Here are pictures showing that the sand has covered trees half-way up, and we think it must have been the same way with the tree we saw. Here are dead trees standing up. (*Showing sketch.*) We think that once the sand covered all these trees, and while they were covered they died. Then the sand blew off, and you can see them dead.

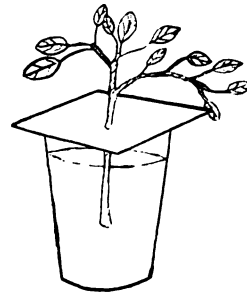
Ruth. This (*showing specimen*) was a branch growing on the trunk



ROOTS UNCOVERED BY MOVING SAND

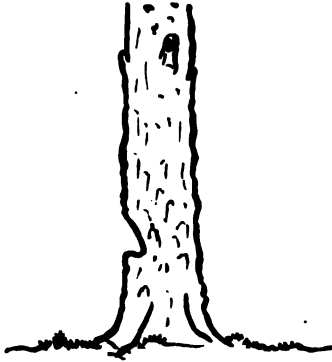
of a cottonwood tree, and the wind bent it down. The sand blew over it and covered the leaves and twigs. When they were covered, they changed to roots; instead of leaves and branches, it has started in to root.

Hermon. A marsh won't stay in one place long; it always dries up. The water evaporates through the plants. We have proved this by putting some water into this glass. We put some paper over it, and it cannot evaporate through the glass, and so if it evaporates, it must evaporate through the plant. There is now mist inside of the top glass. When the plants in the marsh die down, they make soil. We know this because if you look at the soil closely, you can see leaves. And if there is a dune or anything near by, the wind may blow sand into the marsh, and so fill it up.



EVAPORATION

Elizabeth. Margaret and Virginia in the fourth grade went out to Dune Park again, and they were climbing on a sand dune, and they saw some flint, and they thought that was a strange place to find flint, and they thought they would dig down to see if they could find anything else, and they found some pieces of Indian pottery and a perfect arrow-head, and we thought we would make pictures in our mind of how beautiful it was when the Indians were there, and we pictured a big bonfire and some Indians around chipping flint, and a tepee in the background with the women around getting supper or something like that.



THE PITCH PINE.

Teacher. We are going to try to tell you now what would make the sand dunes a good place for the Indians to live.

George. Margaret and Virginia found a tree like this in the sand dunes, and they knew that the Indians had tried to get sap out of the tree. It was a pine tree. They used the sap in their canoes to fill up the cracks where the water gets in. It is called pitch.

Dorothy. In the sand dunes, the fifth grade found bones of a deer. The deer lived there until the white man came, and then they all went away. The

Indians ate the deer meat, and then they made clothes out of the skins, and the ribs of the deer they put into their bows. For the strings of the bow they used the sinews of the hind legs. The Indians could find many other useful things in the dunes—they could find fish, ducks, squirrels, frogs, quails, corn, snipe, cactus, grapes, sandpipers, sweet grass for their baskets, strawberries, blackberries, blueberries, wood for fires and geese.

Katherine (showing specimens of plants). Here are some of the plants we found. This is the sand cherry, about as big around as your finger nail. People make preserves out of that and jelly and wine. And then there is the pitcher plant. It holds water in the swamp, and it is full of water when you find it. I will open one for you. It is full of insects. There are little hairs on the lip, pointing down, and when a bug comes in it can get down easy enough, but when it tries to get out it cannot get out, and it drowns, and the plant uses it for food. Then there is pokeberry that the Indians used to dye their skins with, and their bows and arrows, and people used to make ink from it. Here is some juniper, and some witch-hazel, and some wintergreen that people use for flavoring cakes and candies.

Clara (showing lists of plants written on the board). Whenever we go on excursions, we have a list of the things we find, and here are some of them. If they grow in the dunes, we put them into the list of dune plants, and if they live in the marshes, we put them into the list of the marsh. Here are some plants. Here is the sea-rocket. It belongs to the cabbage family, because it tastes something like the cabbage. This is the bug seed, because the seed looks something like a small bug. This is the chokecherry, and this is bittersweet, ground pine, and this is the gold thread. The roots look like gold threads. And this is black alder.

Arnold (fifth grade).* In the sand dunes we found many different kinds of plants that have different ways of coming up in the spring. Bulbs is one way. In the spring, they don't have to send out roots in the frozen ground, they send up a new plant. Roots is another way. We found plants

*This class had made some rather more mature observations of plants than the fourth grade had done, and we asked them to contribute to our exercise.

with very strong roots, and these roots have food in them, and the plant dies right down to the ground, and the roots send up a new plant. Underground stems is another way. With the underground stem, the plant sends up a sharp bud at the end of the stem. It goes along under ground and sends up little shoots. The shoots are very sharp, so they can get through the ground easily. Then there are some plants that grow by bud. Shrubs and trees have buds on them, and in the fall the leaves fall off and the buds are on, and in the spring, they don't have to start all over. The leaves come



CRATES OF JELLY MADE BY FOURTH GRADE

out at these places. The leaves in the goldenrod are all around near the ground, and they keep the roots warm. They are protected down below. You all know how plants grow from seeds.

Clara (showing glasses and jars). These jellies and preserves, and this grape juice we made from fruit that we found at the dunes.

*Macauley (second grade).** I am going to tell you about the floating bog at Dune Park. It was just a mass of land floating on the water. It is marshy there and cranberries grow on it, and when you jump upon it, all the land moves like the back of a snake. Here is some of the soil that we found. The soil was very rich out there, and black, and here are some of the cranberry plants.

Class Yell. "The Dunes, the dunes,
The dunes for me!"

*By special request he had been allowed to accompany us on our trip. We asked him to tell about the things that most interested him.

A STUDY OF BRIDGES

The exercise on bridges is an outgrowth of the shopwork. The importance of bridges in our community-life, the various types of bridges in different localities (connecting vitally with geography work), the romance of their building, the deeds of bravery, daring, and skill of the bridge worker, and a study of the strains and stresses of the various "members" of a bridge, are topics of live interest to the fifth- and sixth-grade boy. This study in the shop results in an intelligent appreciation of a bridge as a wonderful human achievement. In place of a meaningless mass of iron and steel, a bridge becomes almost a living thing. By means of experiments on test bridges, the effect of "teamwork" is emphasized—how different members of the bridge are working together to help support the load it is designed to carry, some "pushing" and some "pulling." "Tension," "compression" and similar terms used by the bridge engineer become a part of the boy's vocabulary. This interest bears fruit in a desire to share his knowledge with the rest of the School in a morning exercise. Lantern slides of some of the noted bridges are thrown on the screen, and the mechanical principles explained. Experiments are performed, and the different strains and stresses in a bridge are pointed out. The following verbatim report is the result of the work of one class.

Emily. The fifth grade have been studying about bridges and the different things an engineer has to think about when drawing plans for a large bridge and the materials to build with. When a heavy weight is going over the bridge, some pieces of the bridge are pushing, and some are pulling to help carry the load.

The engineer has to be a careful man, and he has to be a mathematician. Before he builds a bridge, he has to work it all out on paper. Then sometimes, he makes small models like these (*showing models*) to experiment with. When he is building the bridge, every single thing has to be right; he can not guess at a single thing; there are too many human lives in danger. And when a beam is put in place, an inspector has to climb over it, and with a hammer he taps the heads of the rivets, and if they do not sound just right, he draws a ring around it, and a workman comes and cuts it out and puts in a new one, and makes it tight. There is a bridge in Quebec over the St. Lawrence river, and when they were building it, and had quite a good part of it done, and the workmen were on it, it collapsed. They found that one beam on the under side had been too weak, and it went down.

and several of the workmen were killed. This is going to happen every time that an engineer is not accurate in his plans.



TEST BOX USED IN
EXPERIMENTS

Arnold. We performed several experiments to find out what the different parts of a bridge will do, and we found that some parts of the bridge push and some parts pull. This is a model of a very simple bridge. I suppose most of you have crossed a stream where there was a board across, and when you got to the middle, it would bend like this. We had a testing-box made, so that we could put the weight on top of this bridge. And then we put the weight down here, and it acts just the same as if we put it on top of the bridge.

Now I am putting trusses on this simple bridge. The bridge without the trusses held 18 lb. 13 oz. We tested it until it broke. This bridge with the trusses does not bend so much, because the weight, pulling down on this beam, pulls on these wires. There are different strains on different parts of the bridge. There is the pulling or tension strain, the pushing or compression strain, and the transverse or bending strain. In this wire there is



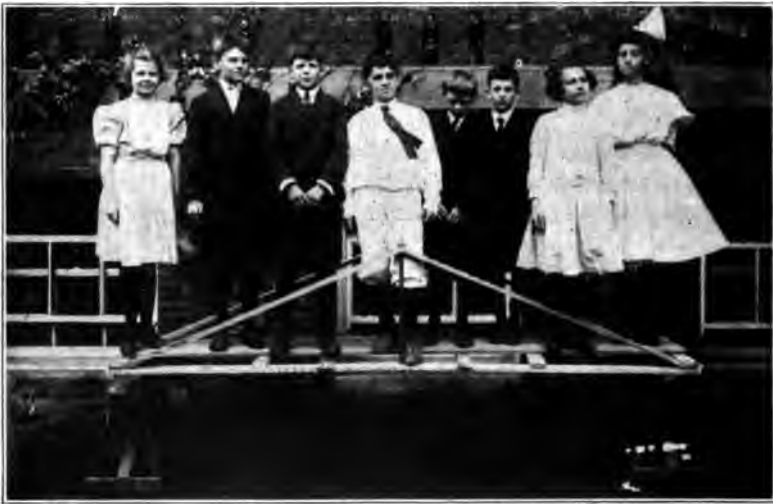
BRIDGE WITHOUT TRUSS

a tension strain, and in these trusses, there is a compression strain. This bridge broke at 125 pounds, while the other broke at 18 lb. 13 oz.; so you

can see how much the trusses do for a bridge. When we put about 50 lb. on the bridge, we first noticed a change. The weight pushing on here and here bent this in like this, but it could not go down because the wires were holding it. This truss broke first because it had not been cut accurately, it was a little shorter than the other. Then this part had to break, because when the trusses were gone, it was nothing but a simple bridge and would only hold 18 lb. 13 oz.

Russell. We are going to show you a simple bridge, only bigger. You see how easily it bends without the trusses. We will put the trusses on now.

(Four boys put trusses on a simple bridge, about seven feet long, and eleven children got on it.)



BRIDGE SHOWING EFFECT OF TRUSS

This summer when I was out in the country, they had simple bridges without trusses, and the men who had threshing machines, carried trusses with them, only they used chains instead of wires. The bridges were not strong enough to carry the threshing machines without the trusses.

Lawrence. This bridge seems almost like that one. We studied a good deal about it, and we found it would have altogether different strains. When in this position, this has the tension strains, and this the compression strain.

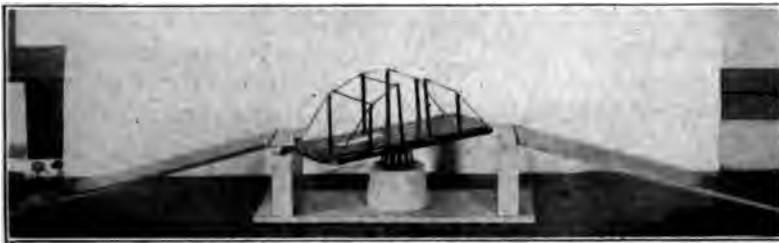
David. This kind of a beam is called an "I" beam, because it is just like the letter "I" in section. There are fibers in iron, just as there are fibers in wood, and the fibers at the top of the beam try to pull apart, and at the bottom, they push together, when it is loaded. This is a diagram of a bridge, and they put these "I" beams where there is the greatest strain. You can see some of these "I" beams on the elevated road at Wilson Avenue.



MODEL OF SWING-BRIDGE BUILT BY BOY

It is the beam that holds the track up. Some of these "I" beams are forty feet long and a foot wide.

Paul. I made a little model of a swinging-bridge, to see where the different strains were. The weight is carried from the ends to the center pivot.



ANOTHER MODEL SWING-BRIDGE MADE BY BOY

This top piece has a tension strain, and this piece has a compression strain.

Lawrence. I made a model of a bridge and took it down to Mr. Wahlstrom last night. He got on it with both feet and it would hold 150 pounds.

Question from audience. How long would it take to build a big bridge?

Mr. Wahlstrom. On one of the large bridges in New York they spent four years drawing the plans, and the engineer had a force of 25 to 50 men. After they begin work on such a bridge, it takes anywhere from two to ten years, according to the size. Of course small bridges are built much more quickly.

CHEMISTRY OF WATER

The morning exercises given by the chemistry and physics classes of the High School have dealt, as far as possible, with topics of general school interest.* Subjects have been chosen in which other grades are interested, by reason of science work now going on or previously carried out, and upon which the high-school class feels that it has something definite and worth while to contribute.

Much subject-matter of physics and chemistry should interest the high-school pupil directly, because in it he should find the broader principles underlying many topics which he previously studied in a more isolated fashion. Once the pupil has grasped such a principle, and has begun to apply it, he has gained a unifying idea which will give him a real and lasting interest in the science. He no longer needs prodding and pulling at the hands of his teacher, but the more pleasant and educative process of guiding and directing. Participation in the preparation and giving of a morning exercise has helped many pupils to a more thorough grasp of such a unifying idea. In their efforts to make plain to others, they have obtained a clearer conception for themselves.

Water, as a subject of science-work, is studied from some point of view in each of the eight grades of the elementary school. Simple facts concerning the uses and properties of water are gained in the first and second grades, through the work in cooking and gardening. The subject is more fully taken up in the third grade, in connection with the study of the city's history. The problem of Chicago's water supply leads to a simple study of the physics of water levels and pressures. The purification of water by processes of settling, filtration, and distillation, is worked out using colored salty water. Several grades are concerned with water as a medium for the preparation of crystals of various kinds. The sixth grade makes an extensive study of atmospheric moisture, rain, dew, clouds and related topics. The eighth grade in the study of minerals is interested in water as an agent for forming veins by methods of crystallization and precipitation. Also water is studied as a standard and means for the determination of the density of minerals by the principle of Archimedes. Many other

*See list of morning exercise topics arranged by subjects.

points of contact might easily be enumerated. The group from the chemistry class working on the preparation of this exercise made a list of the points in which various grades might be interested. It was obvious that only a few of these could be utilized. After discussion, it was decided to make as the main point of the exercise the solvent power of water—that water as it comes from the ground contains dissolved materials and is “hard.”

With this idea in view a week previous to the giving of the exercise its title was announced, and all members of the school were invited to bring in specimens of water from favorite springs and wells, from as many different localities as possible. They were told that the chemistry class would test them and make a report on the interesting samples at the coming exercise. The response to this invitation was immediate, and a large number of samples were brought in from as many different sources. A report of the simple analysis, such as the class could make after six weeks' study of chemistry, was given individually to each person bringing in a sample, and furnished much interesting work for the entire class. The tests made in the exercise, for purposes of clearness and simplicity, were confined to two in number, one for chlorides and one for sulphates. These tests were made in front of a background of blackened cardboard. In other experiments water levels were made visible to the audience by coloring the water with a suitable dye, and using a white background.

The plan of the exercise, which is given below, was displayed prominently during the exercise.

Outline of Exercise

- | | | |
|-------|---|------------------------------------|
| Water | { | 1. Constitution |
| | | 2. Water as a standard substance |
| | | 3. Water as a solvent |
| | | 4. Ground water is “hard”—examples |

The verbatim report follows:

Josephine. The chemistry class this morning is going to tell you something about water. We will first show you of what water is composed, both by decomposing it into its two elements, and by making water from those two elements; and second, that water is a standard substance, and is the basis of calculations. Then we are going to make some tests on waters that were brought in by different members of the School, and show you that there are solids dissolved in almost all kinds of water as it comes from the ground.

The old Greeks thought there were four elements—earth, water, fire, and air—but we now believe that there are over one hundred elements, and that

water is formed from two of the most important of these, oxygen and hydrogen. These glass tubes* are filled with ordinary water, but colored so that the levels can be easily seen. In them the water is decomposed into oxygen and hydrogen. This is done by passing a current of electricity through the water. As soon as the circuit is complete, you can see little bubbles rising into the tubes, the water being forced down. You can see the levels changing, since the water is colored. Now, the hydrogen comes up the tube on the left, while the other tube contains the oxygen. It is plain that there is twice as much hydrogen as oxygen in water.



THE STAGE AS SET FOR THE EXERCISE

This other apparatus† is to make water out of the two gases, oxygen and hydrogen. It was first filled with mercury, then we put in enough hydrogen to force the mercury down to this pasted mark, and then enough oxygen to force the mercury down to the level at which it now stands. There are 10 cc. of oxygen and 20 cc. of hydrogen, so that all the space above the mercury is now filled with a mixture of these two gases. All that is necessary to make them unite to form water is to heat sufficiently. This is accomplished by passing an electric spark through the mixture. There are two little wires on either side of the glass, and, when the circuit is completed, a spark will pass between the two wires and that will cause the hydrogen and oxygen to combine into water. (*Mild explosion.*) You see that the mercury now fills the tube and takes the place of the two gases which were mixed together. This shows that the volume of water is much less than that oc-

*The simple Hoffman apparatus for the electrolysis of water was used. The water, acidified with sulphuric acid, was colored with red ink. A background of white cardboard was placed behind the apparatus.

†A simple eudiometer tube with platinum points sealed in the glass, was used. Spark was furnished by an induction coil and battery. The amounts of hydrogen and oxygen gas introduced into the tube were indicated by white strips of paper pasted in position.

cupied by the mixed gases which are now united in a small amount of water at the top.

Carl. An important use for water is as a standard for different purposes. Water is used as a standard for measuring temperature, heat, weight, and density. We will first consider it as a standard for temperature. If we place an ordinary thermometer in melting ice, the mercury will rise to 32° , and if we put it in boiling water, it will rise to 212° ; therefore, we find that water freezes at 32° and boils at 212° . These facts are used in making thermometers. The unmarked thermometer is placed in melting ice, and the point marked to which the mercury falls. Then it is placed in boiling water, and an additional mark made at this point. The space between the two marks is then divided into 180 equal parts in the case of the Fahrenheit thermometer or 100 divisions in case of the Centigrade thermometer.

Now we will consider water as a standard of density. To find the density of a substance, we have only to find the weight of equal volumes of the substance and water, and obtain the ratio of these two weights. For example, take 10 cc. of water and 10 cc. of mercury, weigh them and we find that the mercury is 13.6 times as heavy as the water. Therefore we say that the density of mercury is 13.6. Water is also a standard of weight. The metric system of weights and measures is based on the fact that the weight of 1 cc. of water is called 1 gram. To prove this experimentally I have here 1,000 cc. of water measured out in this beaker. This other beaker on the balance pan is empty and counterpoised with shot, so that its weight is eliminated. I put a 1,000-gram weight on the other pan and pour the water into the empty beaker. You see* that the water exactly balances the 1,000-gram weight. This proves the fact that 1 cc. of water weighs 1 gram.

Katherine. It takes more heat to raise the temperature of water a certain number of degrees than any other substance. Hence water is used to measure the power of other substances to hold heat. I am going to prove that water, weight for weight, holds more heat than ordinary sand. In this steam jacket* are 115 grams of water, and in this 115 grams of sand. These two beakers each contain 200 grams of water at the same temperature. I pour the hot water into one beaker and the hot sand into the other and stir. I shall expect this beaker, into which the hot water has been poured, to show a higher temperature than the one into which I poured the hot sand. This is true, for this beaker now has a temperature of 43° C., while the other registers only 33° C. This shows that water has greater heating capacity than sand. This fact has an important bearing on climate, for, since water holds heat longer than ordinary sand or soil, there is a marked retarding influence of large bodies of water on the climate of any country near them. This is true of Chicago and the country around Lake Michigan. The fall is later and the spring later than is the case farther inland.

Ruth. The most important quality of water is its power to dissolve substances. Some dissolve more easily in hot water, and some more easily in

*The boilers were of the type generally used in physics. The sand and water were weighed out in cups fitting into the tops of the boilers. The temperatures of both vessels of water were assumed to be the same—that of the room.

cold. Most substances are more soluble in the hot water. Here in this beaker (*holding up the beaker*) is some lime water. It is a solution of lime and water. I will heat it to boiling, which will show you that lime is less soluble in the hot water. While it is heating, I will show you a second substance which is more easily soluble in hot than cold water. This beaker contains potassium dichromate dissolved in hot water. I will place it in this vessel of cold water in order to cool it quickly. (*While waiting for it to cool.*) Some other substances dissolve equally well in hot or cold water. This is true of salt or sugar. In some parts of the country the water contains a great deal of lime. This water is purified by boiling it, which throws the lime out of solution, as is the case in this hot lime water, as you can now see (*holding up beaker of heated lime water showing precipitated lime*). In the other beaker a mass of solid potassium dichromate has been thrown out of solution as it cooled, which shows that it is not so soluble in cold water. So you see these substances behave in opposite ways from one another.

Milo. Ordinary water coming from the ground is "hard," that is, substances are dissolved in it. These substances may dissolve in large quantities. Very hard water is not very good for washing, as the dissolved materials do not allow the soap to act. Compounds of lime are those more commonly found in ground water. These substances are in the soil and enter solution when the water passes through the strata containing them. The two most common classes of compounds in solution in water are chlorides and sulphates. I will show you how to test for them.

I have here some water in which has been dissolved a small amount of potassium sulphate. If I add barium chloride to this, it turns milky, showing the presence of the sulphate. This second vessel contains a dilute solution of potassium chloride; I will add silver nitrate to it. You see it also turns white and cloudy, showing the presence of the chloride. Ordinary "Hydrox" (distilled) water contains neither of these substances. To one portion of this pure water I will now add barium chloride. You see it remains perfectly clear. I will add silver nitrate to another portion. Again there is no precipitation. I will now use these two tests on samples of water brought in by various members of the School to see if they contain sulphates or chlorides.

This water is from Hot Springs, Arkansas. I will test it for chlorides, using silver nitrate. You see it contains an abundance of chlorides. I will also test another portion of it for sulphates. There are also some sulphates in it.

This water is from Harbert, Michigan, brought in by Miss Leubrie. I will test it for chlorides. You see it turns milky. I will test it for sulphates. There are evidently almost no sulphates in that water.

This is artesian water from the Lessing Apartments. I will test it for chlorides. You see it turns somewhat milky, though it does not contain a large amount of chlorides. But the other test shows that it contains considerable sulphate, as you see.

This is also artesian water, but from Lake Geneva. I will test it for chlorides. You see it turns milky. There are some sulphates also, but not as much as in the other case.

This is ordinary Lake Michigan water. I will test it for chlorides. It gives a faint test. I will test it for sulphates. There is no evidence of sulphates.

This water is from a south-side spring. I will test it for sulphates. There are no sulphates in it. I will apply the chloride test. You see it contains a large amount of chlorides.

Although water may contain both sulphates and chlorides, it is not necessarily impure in the sense that it is unfit to use.

Miss Cooke. Is it harmful in either case?

Milo. No, not unless the amount is excessive.

Mr. Osborne. This is the conclusion of the exercise. Some points perhaps may not have been made as clear as you would like, but if you will ask questions, we will try to make them plain.

Miss Hall. Can you explain the effect of Lake Michigan on climate in a simpler way?

Katherine. Lake Michigan takes a longer time to get hot, and a longer time to cool off than the country about it. In the spring it takes it such a long time to warm up that our springs are very late and cold. In the fall, it is so slow in cooling off that Chicago falls are consequently warmer and later than is the case farther inland.

Question from audience. Why is it that the color of the last jar has turned from white to brown?

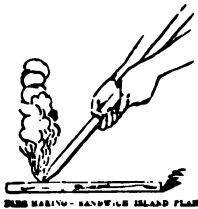
Mr. Osborne. That is the water from the south-side spring. It contains some sulphur which is responsible for the change in color.



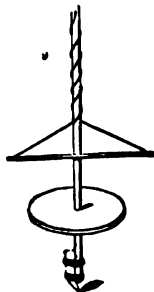
A SERIES OF EXERCISES ON ILLUMINATION

The following reports show how a topic of broad interest, developed in its various aspects throughout the School, furnishes material for morning exercises, and how the value of these exercises is greatly enhanced by the fact that practically the whole School has had experience with some phase of the subject. The knowledge of the experiences of the other grades stimulates each group giving an exercise to thoroughness in the presentation of their contribution to the School.

The subject of fires and illumination is begun in the first grade. The children in their study of Indian life try to make fire in many ways, and they rediscover some of the methods used by primitive people. The accompanying group of pictures shows processes which the children explained with models at a morning exercise given after a series of such class-room experiments.



PINE-MARKING - SANDWICH ISLAND PLAN.



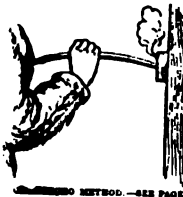
SOUTH-SEA VESP-DRILL.



PINE-MARKING - FIVE PUMP-DRILL.



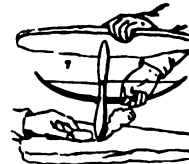
PINE-MARKING - IMPROVED METHOD.



IMPROVED METHOD. - SEE PAGE



PINE-MARKING - SOUTH-SEA PLAN.



PINE-MARKING - SOUTH-SEA METHOD.

MAKING FIRE



ESKIMO AND INDIANS MAKING FIRE

Another time, the first grade told at a morning exercise how they had made dipped candles as shown in the illustration.



FIRST GRADE DIPPING CANDLES

The children also described the candles and candlesticks which they had made for Christmas gifts. The candles were molded of paraffin, colored to match the glaze of the pottery candlesticks.

The third grade has given exercises about illumination which grew out of their study of early Chicago. The children study the lives of the settlers as intimately as possible, and prominent in this study are problems of cooking, heating and lighting.



CANDLES AND CANDLESTICKS MADE BY CHILDREN

With a background furnished by a review of their first grade work,* and the children's imagination, the class traces the development of methods of illumination to the modern kerosene lamp, gas, and electricity, and the use of the two latter for city lighting. Different phases of the work are emphasized in successive years, and the morning exercises which are outgrowths of the work show this very clearly. One year, considerable time had been spent on the earliest methods of lighting by bonfires and the later stages of candle-making. At the morning exercise, the pupils explained the various kinds of wood they had tried for bonfires, and their conclusions as to which

were the most desirable as light-givers. They also showed candles made of five different materials, and told the results of tests which they had made to find out which gave the most light, which burned steadiest, which lasted longest, and which smoked least.

Another year, while working with candles, the third grade showed the numerous kinds of molds with which they had experimented, such as bottles, cylinders of tin or cardboard, and plaster-of-Paris molds.

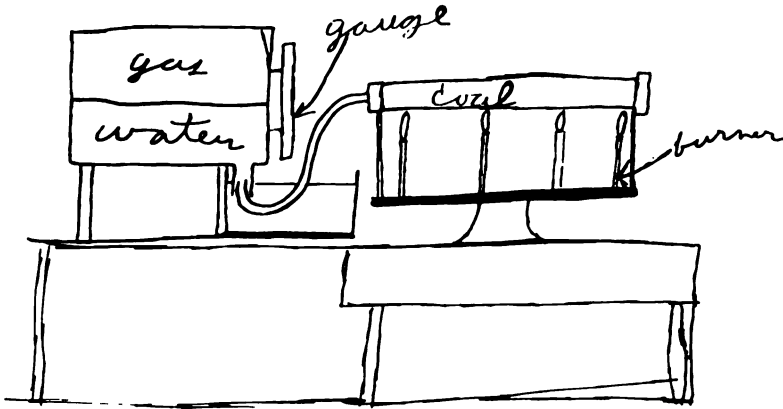


TESTING CANDLES MADE OF DIFFERENT MATERIALS

The study of the problem of lighting the streets and buildings of the city led to the making of coal gas in clay pipes and burning it, and afterwards to the filling of

*In this review the Parker School Leaflets about the history of lighting were used.

a large reservoir with gas, by the apparatus shown in this picture.



DRAWING MADE BY A PUPIL OF THE GRADE

To illustrate the process of gas storage after its manufacture, and the piping of gas to the buildings of the city, the filled reservoir was brought to the morning exercise, and its contents were burned at the end of a long tube, to which a gas-burner had been attached.

During those years, when members of the third grade brought numerous old-fashioned lamps to the School for study, much attention was given to them. The morning exercise which follows was given in such a year. Most of the pictures in the following pages show lamps loaned for examination. The others are copies of illustrations found in old magazines and elsewhere.

For this exercise the room was darkened, and on the stage were all the lamps the grade had. All that could be so used were lighted. Slides were thrown on the screen, and the children described them as shown in the following stenographic report of the exercise:

Lamps

Teacher. The third grade is going to tell you this morning something of the history of lighting—something of the history of lamps. We are not going to tell you the complete history, starting at the earliest stages, and going on up, but by using such examples as we have, we will try to illustrate some of the facts that we know about lamps. The lamps that we have attempted to light show some of the defects of early methods, namely, that they were hard to start, and that after they were started, they needed a good deal of attention.

Joseph. Many years ago they did not have enough lamp-posts to light



TORCH-BEARERS

two lamps are made of hard-baked clay. The large one had a nick side in which the wick may lie. I can't tell whether or not the other has a nick for the wick, but this looks as if it were one. These two

the streets sufficiently, so wishing to go out at night, these torch-bearers to escort to the place they wanted to, then call for them again. torches they did not like much, because they gave so much smoke. The lamp-posts they were like these. It was the watchman's duty to look after lamp-posts. He had a pail with pitch-pine knots. If the was empty, he put some in. of the torches were made in the pot for the knots would upright, when the torch was used.

Marcia. These lamps are kimo lamps. This one is made of soapstone hollowed out, and called a sledge-lamp. The



ESKIMO LAMPS

are made of clay. They are very old-fashioned lamps. The edges of one are turned up to make a place in which the wick may lie, and this is turned up a very little on the edge for the wick.

These are Egyptian lamps. They are all about the same. They hold the oil in here, and the wick lies there. These two have handles.

*Edmund.** This woman is making tallow candles, and this pot holds melted tallow. She takes a stick and ties strings onto it about ten long, six of them, and about four inches apart, and then she dips them several times until there is enough tallow on the strings to make good candles.

These are some molds that are used in making candles. A string to the middle of a nail is dropped into the mold and through a hole

*This speaker referred to a picture of which we have not a copy.



OLD-FASHIONED CLAY LAMPS

ottom. A knot is tied tightly against the bottom so as to keep the string out. Then they pour the tallow in around the string and let it stay until it hardens, and then take out the candles and use them. This mold is a great



EGYPTIAN LAMPS

deal like the one I just showed you, only it makes more candles. These candles were made in this mold by the third grade last year.

Carter. These lamps are old fashioned. This one has two arms sticking up there, and the wicks go through them into the oil place here. They take the cover off and put the oil in the top. The oil that drips from the

wick drops down into this trough and then goes back into here. This lamp has two arms or posts that are fastened on a ring. There is a little round button here, and one like it on the other side, that fastens onto the oil tank so that it can swing either way, but it won't tip over. This is a little cap



OLD-FASHIONED LAMPS

with two tubes sticking up through it, and the wicks go down into the oil-tank. You can unscrew it. It soaks up twice as much oil and gives three times as much light as one wick would. On this you don't unscrew the cap, but put the oil in through a little place there. You can lower and raise the wicks of this one by this little tube.



RUSSIAN SABBATH-LAMP

In this lamp they had a single wick, and when they wanted to put the light out, they put this cap over it and put it out.

Baxter. This lamp is a Russian Sabbath-lamp. They put the oil in the tube here, and it goes out into these six troughs. If the oil drops, it goes along a little groove into this little pan.

This lamp (*exhibiting lamp*) was used in New England about three hundred years ago. You can open this

and put the oil in, and then it will snap back. There is a little place in it to hold the wick. This lamp can be stuck into a crack of a log cabin, or hung up that way. In this lamp you open this place here and put the oil in, and the wick goes up through this small hole. This little wick is in the oil all the time, so that if you want to light something else, you can take that out and light it and put it back.

Question (from the audience). When was that lamp used?

Teacher. That appears to be a copy rather than an original. We think it is a copy of an old Roman lamp, but we are not sure.

Olga. This is a bull's-eye lamp. It has two tubes where the wicks go up. The magnifying glasses are to make the light brighter, and it gives



OTHER CURIOUS LAMPS

more light on account of the magnifying glasses. These tops on the magnifying glasses are to make the light shine on your paper or whatever you are doing. This top unscrews, and you put the oil in here. These are cigar lighters but they are made in the shape of old-fashioned lamps.

Question (from the audience). Who used the bull's-eye lamp?

Teacher. It was used in the United States Senate by Carter's great uncle.

George. This is a sailor's lamp, and has its tank swung from arms on two posts, so that it cannot tip over. There is one nice thing about it, you can turn up the wick by this screw. A good many of the old-fashioned lamps did not have screws to turn up the wick. This tall lamp is a reading-lamp. It also has a screw to turn up the wick. The sailor's lamp has a flat wick which gives more light than the round one.

Thornton. This is a reading-lamp, and it has little caps, and when they stop reading, they put these little caps over the lights and put them out. It is made of pewter. Pewter is made of tin and lead melted together. This thing is called a snuffer and is used to put the light out. These were called



READING LAMP

camphine-lamps because they burned camphine. This lamp is to use in a barn. When a man wanted to go out and harness his horse at night, he would take this with him and jab it into the wall, or when they had guests in the house, they put it on the wall so as to have light on the porch.

Question (from the audience). What is camphine?

Teacher. Camphine is a product of turpentine. It is a highly explosive material; and I presume the arrangement

of the tubes, far apart instead of close together as in other lamps, has something to do with the character of the oil being burned in it.

Question (from the audience). How long ago was it that the bull's-eye lamps were used in the United States Senate?

Teacher. In 1825.

*Mr. Zalinko.** In Russia they had an old style of lighting country-houses. It consisted of a little piece of wood. This was put in some oil, and they lighted this little piece of wood, and when it was burned out, they changed it and took a new one. There was always a little girl or boy sitting close to this old style of lamp and changing these little bits of wood. During the long winter evenings the little boys and girls of the family used to help with these lamps, changing them all the time.

Teacher. It is interesting to know how the man who wrote Webster's dictionary worked. He had two lamps something like this, except that there was no arrangement for raising the wicks. At the beginning of the evening, he had these lamps filled, and when they had both burned out, he considered that he had finished an evening's work.

Volunteer contribution (from audience). It is said that in South America there are very large fireflies, which the natives catch and place in cages made of bamboo. These cages are used as lanterns.

Question (from the audience). Why is a flat wick considered better than a round wick?

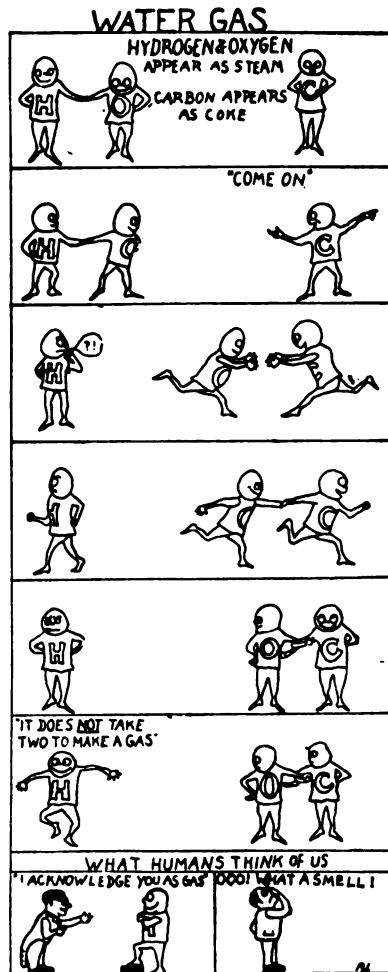
Teacher. There is more chance for the air to reach the surface of the wick, and therefore it gives a better light.

*Mr. Zalinko, of Moscow, was a guest of the School on the day this exercise was given, and made this contribution.

Co-operation between the grades in this study has been possible through the medium of the morning exercise. For example, the third grade, while studying modern methods of illumination, asked the high-school class in physics to give an exercise on electricity, a subject too difficult for experimentation in the third grade.

The process of manufacturing illuminating gas is a part of the chemistry course, and the high-school class studying this subject presented exercises to show laboratory and factory methods of manufacture, and to explain the chemical processes involved. That an exercise of this sort made its point, in one instance at least, is attested by the accompanying cartoon drawn for the school magazine by one of the seventh-grade boys.

This brief outline will serve to show how the work on one topic furnishes much material for exercises. It also shows that the grade presenting any one aspect of a subject has a background of experience gained through other morning exercises on the general subject, and that nearly every one in the audience likewise has a fund of first-hand knowledge that insures his interested participation.



CARTOON DRAWN BY BOY

THREE EXERCISES ON THE HISTORY OF POTTERY

The recognition of manual training and applied art as subjects rich in cultural material, because they mirror the whole history of human progress, opens a field which we feel is full of undeveloped possibilities for our school. If course, it is customary to correlate the handwork as fully as possible with history, science, graphic art, or literature. Sometimes the connection is close and obvious; sometimes it is so slight that there is practically none. The latter situation is the opportunity for the handwork teachers to do some background building on their own account—for it is in the background of each piece of handwork that its cultural value lies. By background I mean the relation of the object to the world, present and past, along the lines of natural science, history, geography or art.

But it takes time to do these things, and time is precious. So sometimes we try, by dramatic representation, to bring a distant place or period to the children at morning-exercise time. Typical phases of work, phases touching closely the other school work, are best for these representations. If carefully planned to be accurate in detail, yet simple enough to be easily done and easily understood, they can impart a great deal of information, and, by beauty of stage picture, can serve as an inspiration to the School to do better handwork than ever before.

As an example of such representation, there follows an account of three morning exercises, given on successive days, illustrating three stages in the history of the potter's art. Contrary to our usual custom, according to which the morning exercise is an outgrowth of class-work, these scenes were arranged chiefly by the teachers, who were able to produce a stage picture more correct in detail and more artistic in ensemble than the children could have managed. In the Indian scene, however, the sixth-grade children, who were studying the Pueblo Indians in their history class, were able to help a good deal in planning the stage business and setting. The tenth-grade ancient history class made the proscenium decoration and the dado for the Egyptian scene, and the boy who took the part of the potter helped to build and learned to use the primitive wheel. (He had worked on the kick-wheel before.) Japan being a country of which we have, as yet, made very little study in our school, the preparation of that scene was wholly a faculty matter.

There was one rehearsal for each scene, so that the effect of the

stage picture could be studied, and so that each child could know just what was expected of him, but as there were no spoken lines, slight variations of procedure were of no importance, and each could go quite independently about his business. As there was no change of scene during the exercise, no curtain was necessary.

The chief materials for scenery were gray building-paper (\$1.00 per roll of about 60 yards) and colored chalks. The latter were used directly upon the brown-painted wall for the Egyptian dado, and afterwards washed off with sponge and water. In the Indian scene, beyond producing adobe-colored walls, our chief problem was to disguise the doorway. The children took the door measures, compared them with the pictures of Pueblo doorways* and concluded that a high sill and a transom would make our opening what it should be.

The Japanese scene (of which the reproduction is wholly inadequate) was the most complicated, as we had to suggest a garden, and could spare only three feet of stage depth for it. At that distance from the back wall, we set *shoji* (wall-screens) improvised out of old scenery frames, with cardboard panels at top and bottom, and real shoji paper between. Behind these was a backdrop (building paper and chalk again) made for us by an artistic alumnus, and at the base of it were potted ferns, a pink azalia, and a purple iris of Japanese paper. The charm of the scene lay in the fact that we had electric lights behind the shoji, while the gymnasium was slightly darkened, so that one seemed to be looking out into the sunlight. A pine branch behind one shoji panel threw its shadow upon the paper with a truly Japanese effect, but the flashlight was so much stronger than our stage sunlight, that the charming shadow is wholly absent from the photograph, and the perspective of the backdrop is lost.

In making our costumes, we chose the materials, as well as the colors, that were the nearest we could buy to the real things. Of course some of the Japanese garments were genuine, and for our apprentices we took pains to select colors and patterns suitable for men, for it is easy to borrow Japanese kimonos for women, but hard to find Japanese garments for men in this part of the world. The properties, as far as possible, were authentic. The extreme simplicity of setting, which was intended to be suggestive, rather than photographic, made the impression clear, even in the minds of the youngest children, while at the same time it was a good background for the working figures.

*The most useful reference we found was Mindeff's article on "Pueblo Architecture" in the Report of the Smithsonian Institution, No. 8.

History of Pottery—Indian Scene



INDIANS MAKING POTTERY

Leader. Pottery is one of the oldest arts known to mankind. Almost all peoples have made some sort of pottery, and from the examples we find of the work done in this line, we have learned a great deal of what we know about the early races which have lived in the world. The art began in a very simple way, and gradually became better and better. It sometimes happened that people in one part of the world were just at the beginning period of pottery making, while other people in another part of the world had advanced much further in the art. We are going to show you three scenes representing three stages in the history of pottery making. We shall begin this morning with our own southwestern Indians, tomorrow we shall represent the early potter's wheel, and Wednesday we shall give a scene representing the decoration of pottery.

Matilda (sixth grade). The Hopi Indians live on the table lands of Arizona and New Mexico. The stage today represents a room in one of the Indian houses. The houses of these Indians are built like steps, and each step is called a terrace. The gymnasium floor is supposed to represent the ground, and the stage represents the first terrace. This really does not represent it quite right, because it is a good deal higher from the ground to the first terrace, but because the stage is so low we could not represent it exactly right. This ladder leads from the ground to the first terrace, and this door leads to a room opening on the terrace.

(Enter Indian woman and child from doorway at back of gymnasium. Passing down aisle, they ascend stage by ladder. Woman has load of clay wrapped in cloth hanging from head. Child carries water bottle hung on thong which passes about head.)

This woman and child have been down on the plain getting clay. They get the clay from the banks of the river. The children wear brown blankets, but the women wear blankets dyed dark blue.

(Woman opens cloth, gets stone pounder, and goes to work. Child squats by her, watching. While first woman pounds, enter girl from door L, takes prepared clay and begins to build bowl.)

This shows the woman pounding the clay. She must pound it up, because it is very hard sometimes, and she pounds it up so that she can work with it. Then she puts the clay that she has pounded into a jar, and she puts water over it, so that the clay will settle and separate from stones or other impurities. She goes into another room now.

This is a young Indian woman. You will notice her hair. The young women when they are of age to be married, wear their hair in whorls over their ears, but the married women and the older women wear their hair hanging and tied in two bunches, as the first one wore hers.

(Enter third woman. Gets partly-finished bowl from back of stage and goes to work.)

The young woman is making a bowl out of clay. This other woman who has just come in takes a bowl that was not quite finished, and scrapes it. She uses a piece of gourd to scrape with. The young woman, having built up her bowl as far as she can while the clay is very soft, puts it aside to harden a little, and gets another bowl, that she has started another day, and works on it. She molds the clay in a basket, because that helps her to shape it well.

(Enter fourth woman.)

This woman takes a slab and mixes the colors that she is going to paint the bowls with. She gets these colors from the earth. She digs up red and yellow and black earth, and mixes each with water on a grinding slab. Then she uses them on the bowl. When it is finished and dried, it is ready to be fired. When they have a number of pots all finished and waiting to be fired, they pile the pieces together and put the fuel over them. They used to use lignite for fuel, but now they don't because they can't get it. They made much better pottery when they used lignite for fuel. As soon as this (the third) woman has scraped the bowl a little, she takes a polishing stone and polishes it.

Fourth-grade child. Where do they get the red ground from?

Leader. That is to be found in their country. You have heard of the 'painted desert' of Arizona and New Mexico. A good deal of the earth here is colored with iron, and that is where they get the red and yellow.

Third-grade child. Do the children make pottery?

Leader. The girls learn to make pottery, but they do not make many pieces until they are nearly grown.

Question (from audience). What kind of brushes do they have?

Leader. They sometimes take hairs from their own heads, or from animals' tails, but more often use vegetable fibre, which they bind to a little stick.

Second-grade boy. What do the boys do?

Leader. One of the things that the men do is to make clothes, not only for themselves, but for the women. They do all the weaving. They also

work on small farms, which they cultivate down below the mesa. They raise sheep, too, and the men and boys take care of them.

High-school boy. What kind of fuel do they have now?

Leader. They have no coal in their part of the country, and very little wood, so now that the lignite (which is coal in the process of making) is exhausted, they have to use the fuel they have at hand. So they go into the sheep corrals, where the earth is packed down hard, and dig up pieces of the down-trodden dung to burn. They do not use wood for firing pottery because it does not last long enough. The fire has to smoulder thirty-six hours. They pile the fuel right upon the pottery, making a mound of it. Sometimes the pots that are touched by the fuel are scorched on one side, but that does no harm—only adds variety to their color.

Fourth-grade child. What kind of houses do they live in?

Leader. They live in very large houses, called pueblos, which are practically villages. All the people live together in one house. Sometimes each family has a room, and sometimes, if they are well to do, several rooms. You can see some pictures of pueblos in the hall.

High-school girl. Do they plan their designs carefully?

Leader. As far as the design goes, yes, they do plan carefully and beautifully, but they do not always plan the spacing very carefully. You can tell that because the patterns do not always come out even.

Seventh-grade child. Do they ever live anywhere except on the mesa?

Leader. Some of them now build houses down near their farms, in order to save the long walk up to the mesa. Matilda will tell you why they build their homes on the mesa.

Matilda. The reason they live on the mesa is because the mesa is very high and steep, and in early days there were savage Indians around them. They lived on the mesa to keep away from their enemies.

Fifth-grade child. What are their houses built of?

Leader. They build their houses of the stone of the mesa. This is another curious thing about the Hopi Indians—the men go out and gather the stones, but the women build the houses; the women are the architects.

First-grade child. I should think that the women did the hardest work.

Egyptian Scene

Leader. Yesterday morning we showed you something of the potter's work before he had learned to use a wheel. The Indians are still making pottery as you saw the Indian women making it yesterday, but in Egypt, nearly four thousand years before the birth of Christ, people had learned to use the wheel in making pottery, and this morning we are going to show you how the Egyptians worked.

(Enter Egyptian man, water jar on shoulder. Goes to mass of clay on plank at back of stage, sprinkles some water upon it, and begins to work it with his feet.)

The first thing that the Egyptian potter has to do is to prepare the clay. He does that by tramping on it with his feet. He can do it quicker



EGYPTIAN POTTERY-MAKER

n that way than by working it in his hands. First he washes it, then kneads it, and when it is worked enough, he takes it to the wheel. The early Egyptian potter worked his wheel by hand; you will see how he used it.

(Potter crouches at wheel, throws lump of clay upon middle of it, sets wheel whirling with his hand, and begins to shape bowl.)

Out on the screen in the hall there is a drawing, from an Egyptian wall painting, of a hand-wheel, and another of a late Egyptian wheel worked by foot power, very much as ours down stairs is worked. Unfortunately we did not get our Egyptian wheel to work very well by hand. It is not heavy enough to revolve well, so we are going to show you what modern invention has done. The improvement made next after inventing the kick-wheel was to put a crank on the wheel and have it turned by a boy, and since that was invented, we have learned to apply mechanical power. (A belt run by electricity is attached to the wheel.) It is absurd to try to show you an Egyptian potter's wheel run by electricity, but it has its advantages; we wanted to have a power-wheel for the modeling room, and we have found out that we can have one. While we are waiting for the wheel to be rightly adjusted, I will read you part of a poem by Longfellow (I have read you portions of it before) about a potter at work at his wheel. From the earliest times, poets have been interested in watching the potter working at his wheel. In the Bible, you will remember, there are a great many references to the subject. In Jeremiah, the prophet is told to go to the house of the potter, and there the word of the Lord will come to him. He goes, and as he watches the potter at work, he realizes that as clay is in the hands of the

potter, so is mankind in the hands of the Lord. Longfellow was inspired by watching the potter work to write his poem "Keramos," which I will quote:

"Turn, turn, my wheel! Turn 'round and 'round
Without a pause, without a sound.
So spins the flying world away!
This clay, well mixed with marl and sand,
Follows the motion of my hand;
For some must follow and some command,
Though all are made of clay."

Thus sang the potter at his task,
Beneath the blossoming hawthorne tree;
And while he plied his magic art—
For it was magical to me—
I stood in silence and apart,
And wondered more and more to see
That shapeless, lifeless mass of clay,
Rise up to meet the master's hand,
And now contract, and now expand,
And even his slightest touch obey.

In the following verses, the poet tells the things that he saw in his mind as the potter worked at his wheel. Then comes another verse of the potter's song:

"Turn, turn, my wheel! This earthen jar
A touch can make, a touch can mar;
And shall it to the potter say,
'What makest thou, thou hast no hand.'
As men who think to understand
A world by their creator planned,
Who wiser is than they."

Now we can watch the work.

First, the potter has to get his clay well centered—that is, to get the lump of clay running true on his wheel.

A teacher. How fast would a potter have to move the wheel with his hand—the old Egyptian wheel?

Leader. He would have to use his hand every few minutes, as we do the foot on the kick-wheel. A modern variable-speed power-wheel has a maximum of about 150 revolutions a minute, but the potter keeps it slowed down a little most of the time.

Eighth-grade boy. Do they purify the clay after they get it?

Leader. Yes, it has to be "washed," as we say. It has to be put to soak and then made into slip, which is strained to take out the impurities. Sometimes the clay is not the best for this kind of work, and other materials have to be mixed with it.

Sixth-grade girl. Did the Egyptian women make pottery?

Leader. No, the Egyptian men made the pottery; the Egyptian women did some of the weaving, though not all of it.

Fifth-grade child. How long would it take to make a jar?

Leader. A good potter can make a jar in a few minutes, but it will take him longer to make a perfect and beautiful shape.

Second-grade child. What makes the clay go up?

Leader. He presses on it with his hands, and the clay has to go somewhere, so it pushes up.

Second-grade child. It can't go down, because the wheel is there.

Third-grade child. Was the clay hollow when he put it on the wheel?

Leader. No, it was a solid lump.

This room that we have on the stage is not a room in the home of an ordinary potter. No Egyptian potter of ordinary rank would live in a beautiful room like this; but many times the Egyptian potter was employed by rulers, or by wealthy persons of the country, to make pottery for them. This scene represents a room of the person who has employed the potter. The dado has a lotus design. The lotus is the sacred flower of Egypt, and is one of the symbols of the sun-god Ra, their chief deity. You can see the bud and two forms of the lotus flower. The design of the columns at the sides of the stage is taken from the lotus bud and its stem. The figure over the top of the stage opening is the winged globe, another sun symbol. It represents the sun-god Ra, in his power to go everywhere over the earth, as the sun sends its light to all parts of the world. This symbol is often used over doorways, to insure the protection of Ra for all the people of the house.

Eighth-grade child. How did they fire their pottery?

Leader. They had a kiln about as high as a man, fed with wood at the bottom. It had a series of shelves, but not a double cylinder, like our kiln. It was a single cylinder, and the flames came right up among the pots, so that sometimes the pottery was scorched brown, as in the case of the Indian pottery.

Japanese Scene

Leader. We have tried to show you, in the last two days, various ways that potters work—on Monday the early way, just using their hands, without the wheel, and yesterday we showed you a little of how the wheel helps in the making of pottery. Today, we are going to show you something about the decorating of it. But before we begin this scene, I want to say a few things about pottery work.

It is a fascinating kind of work, but there is a good deal that is very laborious about it, and very trying. Some of you who have had experience, know how firing tries your patience. The only way it is possible for people to work at pottery and not find it mere drudgery, is to work with love for the art—with enjoyment in it. This is true not only of pottery work, but of all kinds of handwork. People ought to be able to do their work, not only because it is useful, but because they have interest in it and love for it, and are thinking of the beautiful thing that they are going to produce. But peo-



JAPANESE DECORATING POTTERY

ple cannot make beautiful things unless they see beautiful things about them. There is no country where the common things that the people use, the ordinary home utensils, are more beautiful than in Japan. For that reason, we have chosen a Japanese potter's shop for our scene this morning. We have tried to represent pottery production under ideal conditions.

(Enter master potter, r., goes to table, l. c., kneels behind it and begins to work. Presently enter two apprentices, l. As they come in from the street, they slip off their clogs at the entrance; the master potter greets them, and they, too, go to work at table, r. c. Presently enter, r, master's little daughter. Goes to watch him. Assistant brings her a ball to play with, she runs out, c. back, and is seen playing in the garden.)

The potters in Japan formerly did, and even today in most Japanese villages, still do most of the pottery work in their homes. Or, the potter's shop where the jars are made is sometimes one house for a village, and the workers go to that one shop for their shapes; that is, they get the potter to make the jars, and then they do the decorating in their own homes. They do not work in factories, except in a few of the large cities. Sometimes the master potter has his own house, and other potters come and work with him. They put great care and labor into their work to make it as beautiful as possible. They will sometimes work months on a single piece to make it perfect. They plan their decorations very carefully, and then execute them very carefully. You know how very beautiful the Japanese jars are when they are finished. It is so because the artists are willing to spend their time and love on that kind of work.

(Enter maid with tea service. Bows and withdraws.)

It is a custom of the Japanese to interrupt themselves in the middle of the forenoon and in the middle of the afternoon to take tea, because if they are tired they cannot do their best work, and the tea refreshes them.



JAPANESE DRINKING TEA

(Workers stop painting and gather about tea service, where the children sit. All drink. Maid comes for tea things and all return to work.)

The art of the Japanese potter descends from father to son. The artist's children come and play in the shop, watch the beautiful wares being made, and absorb the artistic feelings of their fathers. Gradually they learn to help in various parts of the work, and at last become artists themselves.

While the potters are at work, if there are any questions, I will answer them if I can.

(From time to time a worker gets up to study a flower, a butterfly, some object that he wishes to introduce into his design.)

Second-grade child. What are those things they had on their feet?

Leader. They are the kind of shoes people wear in Japan. They call them *geta*. They take them off at the door of the house, because they consider it an untidy thing to come into the house wearing the shoes in which they walk in the street. They do not understand why we do it. They keep their houses very clean. All the floors are covered with straw mats.

Fourth-grade child. Do they talk when they work?

Leader. Yes, sometimes. They do not talk a great deal, however, for they know that they cannot do their best work if they chatter much.

Seventh-grade child. Who makes the most beautiful pottery?

Leader. That is very hard to say, because different kinds of pottery are beautiful in different ways.

Fourth-grade child. What do the Japanese women do?

Leader. Just about what our women do. They keep house, and sew, and make calls. The very poor Japanese women sometimes work in the fields, or on the docks.

High-school girl. How do the Japanese fire their pottery?

Leader. They have kilns. They have saggars—fire-clay trays in which they set the pottery—and they put these trays into the kiln.

High-school girl. Do they draw from natural things?

Leader. They do not keep the natural things directly before them, but they study the natural things and get inspiration from them. They draw from the images of these objects that they have in their minds. But they do not try to represent nature exactly as they see it. They arrange the object to fill, in the most beautiful way, the space they have to decorate.

High-school boy. Do they make pottery on the wheel?

Leader. Yes. In the hall there is a picture of a modern Japanese potter at work at a wheel. They do have some electric wheels in Japan now-a-days, but they use the old style of wheel too. The pottery that they make for export is almost all cast.

Sixth-grade girl. What kind of colors do they use?

Leader. They use different kinds of mineral powders that they mix together. They use metallic oxides, just as we do. Iron rust is one of their colors; they make orange and brown and yellow with it; they use cobalt to make their blues, and manganese to make their purples. Many of their colors are what we call enamels. Of our three potters at work there, one is working on raw clay, and the other two are working on jars that have been fired.

Seventh-grade girl. Do they draw their designs before they work on the jars?

Leader. Only sometimes. Sometimes they draw them carefully, with much detail; at other times they indicate the principal lines, but put in all details with the mineral paint. On the cheaper wares, the drawing is done directly with the paint.



**EXERCISES EMPHASIZING SCHOOL UNITY AND
SCHOOL POLICIES**

Opening Day of School

Commencement Day

Memorial Day

Town Meetings

EXERCISES EMPHASIZING SCHOOL UNITY AND SCHOOL POLICIES

The exercises under the heads of *Opening Day of School*, *Commencement-Week Festivities*, *Memorial Day*, and *Town Meetings*, are selected as typical exercises, to indicate means by which the school community is unified by discussion of common purposes and relationships; to show briefly how boys and girls are brought into contact with the chief principles and policies of the School; how they participate in questions of school administration; and how they sometimes, as a school, enter into the wider activities in which older good citizens are interested.

The first and last days of the year in any school are full of significance. On the first day in our school, every child is welcomed into the school family circle and made to feel himself a part of it. On the last day, every high-school graduate goes out knowing that he will be truly missed; that his progress will be followed with interest and affection by his teachers and schoolmates as well as by his parents.

It is for this reason that the teachers think it worth while to give, verbatim, a part of a first-day exercise and a program of the commencement festivities. The examples selected are similar in form to all our first- and last-day exercises. They offer little perhaps in originality in plan, or suggestion—they picture simply the social life of a school in which it seems important to the teachers that the atmosphere shall be like that of a good home—intimate, warm, human—a place where each individual is valued for his own sake. It is just because these are exceedingly simple and personal gatherings, and because they have been effective in influence, that an account of them appears in this book.

MORNING EXERCISE—OPENING DAY OF SCHOOL December 29, 1909

Song—"The Earth is the Lord's."

Chairman—*The Principal*.

I believe, judging from the look of happiness in many faces, you will agree with me that while vacation is a joyous time, the end of it—the getting back together again—is the best part of it. Is it so? I wish we might all

go on from the place where we left off last June. You remember, the graduating class gave us the play, "The Melting Pot." The play set a high standard for us to live up to. I think you will remember, also, that on the program for the play were some words from Colonel Parker. These expressed the central idea of the play. I want every boy and girl to have and to know this quotation, for if we can put the spirit of it into our lives and actions, we can grow in the understanding of good citizenship right here in this little school; we can make of ourselves good Americans, and that is what we want to be—Americans in the spirit of that quotation. I am going to read it to you, and also two paragraphs from the same chapter of Colonel Parker's book. I shall read them because they give the keynote of the spirit we want here—that of *freedom* and *responsibility*. Colonel Parker says:

"Let us now turn for a moment to the problem of America. We who are in the thick of the fight, in the midst of a struggle which is overwhelming, do not appreciate the tremendous trend of human affairs; the danger signals which fly before us are unwatched and unheeded. What are we proposing to do? *That which has never yet been done in the world's history.* Foreign colonies have settled in other nations, to be ostracized, persecuted, oppressed, and downtrodden, but here in America we are bringing together all peoples from all parts of the known world, with all their prejudices born of centuries, each naturally having its own customs, rooted in earliest times and growing with a national growth—the Germans and the French, the Italians and the Russians, the Poles and the Irish, each with their prejudices, with their views of life, producing different customs, political, social, and religious, opposed as earth and heaven. Here they come into our broad continent, and we propose to have them live together, and legislate together for the best good of the whole. No dream of the past, no vision of the progress of humanity, could ever propose such a tremendous problem as this—this blending and fusing of the peoples of the whole earth in one crucible of common interests and brotherly love." . . .

"The universal movement that had its beginning when the morning stars first sang together, was the tendency of the soul toward freedom. The form of government it took was democracy, founded upon the principle that *society can rule itself*; that each member of society contributes to the good of all, lives for all, and receives from all that which all can give. A fundamental principle of democracy is the responsibility of each for all and all for each. If one is weak in the government, if one is weak who has the ballot, who has a choosing power, it means the weakness of all; and it becomes the imperative duty of all to present the needed conditions to awaken the feeling of responsibility."

"The goal of humanity is freedom. Liberty is the right of all men, but freedom is an individual acquirement through search of God's laws and obedience to them. The possession of freedom includes every possible good to the possessor—happiness, citizenship, personal development, and ethical action. The highest personal right a community can accord to an in-

dividual is the liberty and the means to become free. The means of acquiring freedom may be summed up in one word—education. True education is the presentation of the condition necessary for the evolution of personality into freedom. Democracy is the only form of government under which the methods of freedom can be fostered."

There is no such thing in existence today as pure democracy, but we in this school are trying to learn what democracy is. We want to be free, and to learn how to use that freedom; we want to be responsible—all for each, each for all. Ralph, what is the great word of the School?

Ninth-grade boy. Responsibility.

Chairman. One of our first responsibilities today is to make the new people feel that they are members of the school family. I should like to have all the pupils who are new in the School this morning (who have never been here before) stand. (*All new children stand a moment.*) Now you belong to the family. I wonder how many know the school motto? (*Hands up.*) Josephine, tell the new people our motto.

Tenth-grade girl. "Everything to help and nothing to hinder."

Chairman. Now altogether. (*School repeats motto.*) There are four new members of the faculty this year—a new head of the English department, a teacher of oral reading, a second-grade teacher, and a new secretary in the office. (*Then followed the introduction of these new members. Each in turn stood and said a few words.*)

I am rather glad that we have but one minute of our time left—not long enough to hear from any one else. We want to know where everybody has been and what everybody has done during vacation, and I am afraid all would want to talk at once. On Friday we shall have those who were at Seattle this summer tell us about the Fair and the good times they had there. Tomorrow morning, we shall have a divided singing rehearsal, and we shall expect every one to help in getting new morning-exercise songs ready to sing.

(*After the closing song and announcements, pupils left the hall in time with the music of Schubert's "Military March."*)



COMMENCEMENT FESTIVITIES

The class poem, history, prophecy, and songs, which by tradition have become a part of most commencement programs, are used in a different way in our school. They are printed in the June number of the school magazine, and read either at a supper, or perhaps, as in June, 1910, around a campfire at a beach party. They are part of a frolic always given by the faculty to the graduating class. The *real contribution* of the class to the School does not come upon graduation day, but for a number of years, it has been made the week previous to graduation, in the form of a carefully prepared play.

The morning exercise on graduation day is extremely simple. It consists, as the following program shows, in some truly beautiful music, an inspiring bit of literature, an impressive word from one of the trustees or some one particularly qualified to express the idea embodied in the program, and a personal word from the principal of the School to each one of the graduates, with the presentation of the certificate.

Commencement Program *June, 1911*

Processional Hymn—The City of God	- - - -	<i>English Hymnal</i>
	Fifth to Twelfth Grades and Alumni	
A Note of Patriotism	- - - -	<i>Walt Whitman</i>
	Mr. Detmers	
American Citizenship	- - - -	<i>Francis W. Parker</i>
	Mr. Carley	
Hymn—O Lord of Nations	- - - -	<i>Church Hymnal</i>
	Fifth to Twelfth Grades	
Training in Citizenship	- - - -	<i>Alumni</i>
	Beatrice Topping	
Duet—O Lovely Peace	- - - -	<i>Händel</i>
	High School Girls	
The Meaning of Citizenship		
	Mrs. Ella Flagg Young	
Chorus with Soprano Solo—Lovely Appear	- - - -	<i>Gounod</i>
	Fifth to Twelfth Grades Claudine Sturm	
Presentation of Diplomas		
	Miss Cooke	
The Earth is the Lord's	- - - -	<i>Eleanor Smith</i>
	Fifth to Twelfth Grades	

Closing Exercises for the Primary Grades *Monday, June 17, 1912, at 10:00 o'clock*

Hymn—The King of Love my Shepherd is
First to Fourth Grades
Psalm Twenty-Three
Miss Walker

Song—How Sweet is the Shepherd's Sweet Lot	- - - -	<i>Cornish</i>
Fourth Grade		
Songs		
—What can Lambkins do?		
—The Sheep	- - - - -	<i>Eleanor Smith</i>
Poems		
—Lambkins	- - - - -	<i>Rossetti</i>
—A Child	- - - - -	<i>Rossetti</i>
—A Wish	- - - - -	<i>Rossetti</i>
—The Lamb	- - - - -	<i>Black</i>
Second Grade		
Song—Follow, Lambkins	- - - - -	<i>Nordraak</i>
Third Grade		
Poem—The Wonderful World	- - - - -	<i>W. B. Rands</i>
First Grade		
Trio—Lift Thine Eyes	- - - - - (Psalm CXXI.)	<i>Mendelssohn</i>
Eleventh and Twelfth Grade Girls		
Canon—Look Upward	- - - - -	<i>Reinecke</i>
High School Girls		
Unselfishness—The Theme of the Graduating Class		
Miss Cooke		
Anthem—Blessed is He	- - - - - (Psalm XII:1)	<i>Nares</i>
Fifth to Twelfth Grades		

This exercise is an example of one in which the little children are included in the thought and effort of the older ones. The part of the program which primary children gave was the outcome of regular class-work during the spring quarter.

The Senior Class Play Given in June, 1911

THE TURN OF THE ROAD

BY RUTHERFORD WAYNE

Note—In 1911 the play by the Senior class was given four times—the first performance at Hull House, the second, third and fourth performances in the School Assembly Hall.

There were changes in the cast of characters for each performance as there were but ten character parts in the play and fourteen members in the Senior class. It is the policy of the School that everyone in the class shall receive the training and take part in at least one of the school performances of any play.

The scene throughout is laid in the kitchen of William John Granahan's house in the County of Down.

A month elapses between Scenes I and II.

Time. The present day

Epilogue. The evening of Scene II

SYNOPSIS

ACT I

Robbie John, the younger son of an Irish farmer, has a wonderful talent for the fiddle, which seems to have become his very life. Only his sister, Ellen, a simple country girl, seems to have any sympathy for his ambitions. His grandfather, a kindly old gentleman, though he is very fond of Robbie, does not understand his taste for music, while his parents, hard-working farmers, who see little in life beyond the making of money, think that playing



SCENES IN THE TURN OF THE ROAD

the fiddle is simply a waste of time, and want Robbie to give it up. Sam James, the elder brother, malicious and selfish, knowing that if Robbie t to the fiddle he would be disinherited by his father, constantly urges Ro to continue his music and to strive to make a name for himself. In atmosphere of materialism and lack of understanding, Robbie is forced keep his ambition in check, and finally, realizing that by giving up the f his love for Jane Graeme, a neighbor's daughter, will be realized, he persuaded to burn the fiddle.

ACT II

A month later Robbie and Jane Graeme are engaged to be marr But, in spite of this, Robbie is not happy. By a strange coincidence, a tri fiddler whom Robbie had befriended in the course of Act I, left a valu fiddle to him, which Samuel James manages to keep before Robbie's e so that he may the more easily be tempted to take again to playing.

Jane Graeme, realizing that Robbie is unhappy, that "God had made him a musician and not a farmer," sacrifices her love for Robbie and urges him to "take his fiddle and do what his heart tells him." On hearing of Robbie's intention, Mr. Graeme immediately breaks off the engagement, and the elder Granahan, in a fit of passion, disregarding the entreaties of the mother, drives his son from home.

EPILOGUE

In this scene we see the "turn of the road," not only for Robbie, who now has an opportunity to realize his life work, but for the entire household excepting Samuel James, for they all begin to see a new light—idealism—shining before their eyes. The father, utterly broken hearted and despondent, feels keenly the remorse for his sending Robbie off. The grandfather, in a speech full of pathos, brings his son to realize that "it is not money alone that makes life worth living," and the scene closes when the latter leaves the door ajar, as an indication of his welcome to Robbie, should he choose to return home.

Louis Berger, '11.

Events

Given in Honor of the Graduating Class
Nineteen Hundred Eleven

Reception to Parents and Friends of the Class, June 16	-	-	-	<i>The Alumni</i>
Senior Farewell Party, Saturday, February 25	-	-	-	<i>Senior Class</i>
Dinner and Dancing Party, Saturday, May 20	-	-	-	<i>Eleventh Grade</i>
(Dinner prepared and served by the Junior Class)				
Weeje Party, Saturday, October 29, 1910	-	-	-	<i>Tenth Grade</i>
Dancing Party, Saturday, April 22, 1911	-	-	-	<i>Ninth Grade</i>
Reception in Club House, Thursday, June 15	}	-	-	<i>Eighth Grade</i>
Binding Souvenir Copies "The Recorder"				
Presentation of Poems, Friday, June 16	-	-	-	<i>Seventh Grade</i>
(Book printed, illuminated, and bound by grade)				
Presentation of Class Flowers, Friday, June 16	}	-	-	<i>Sixth Grade</i>
Making Ice Cream for Tuesday Luncheon (Boys)				
Serving of Tuesday Luncheon (Girls)				
Presentation of Class Colors, Friday, June 16	-	-	-	<i>Fifth Grade</i>
Luncheon in K. B. Hut for Senior Boys, June 8	}	-	-	<i>Fourth Grade</i>
Luncheon in E. N. Hut for Senior Girls, June 9				
Closing Exercises and Party	}			
Luncheon in Library				
Tuesday, June 13				
Souvenirs and Refreshments—				
Class Pictures and Cakes	-	-	-	<i>Third Grade</i>
Table Flowers, Grape Juice, and Jelly	-	-	-	<i>Second Grade</i>
Place Cards and Lemonade	-	-	-	<i>First Grade</i>
Bonbon Boxes, Place Cards, and Nuts	-	-	-	<i>Kindergarten</i>
Informal Dinner, Saturday, June 3	-	-	-	<i>Faculty</i>
Senior Class Supper and Dancing Party, Friday, June 16				
At Mrs. Blaine's Residence				

MEMORIAL DAY EXERCISES

The verbatim report of the Memorial-Day exercise, May 1910, is included in this group of exercises because it shows another yearly custom of the School. We believe that through the words and deeds of Colonel Parker, and of other Civil-War heroes, the pupils are more strongly impressed than they could be through more abstract observances of the day. The verbatim report of the exercise for 1912 is not given, but the picture suggests how the same purpose was carried out with the help of a number of Civil-War soldiers.

Morning Exercise—Memorial Day

Friday, May 27, 1910

Song. "Star Spangled Banner."

Principal. I hope that every one, even the youngest here, knows something of the purpose of Memorial Day—that day set apart to honor the heroes of the Civil War who gave their lives for their country. Because they were willing to settle a great question at the cost of life itself, the great unified nation of America is possible.

We should remember, not only on this day, but every day, that our nation owes its birth and its unity to a high democratic ideal; to a spirit of self-sacrifice. Only the preservation of that spirit can keep safe what has been so dearly won.

The responsibility for unselfish devotion and patriotism rests upon each one of us. We must be trained to understand what was gained by the Revolution and the Civil War.

True patriotism does not mean getting power, so that we may have the best for ourselves and our friends; it does not mean the securing of special privileges for the North, the South, the East or the West; it does not mean, even, the seeking to make America great at the expense of other nations. I believe it means that we should try to make America the symbol for justice and right dealing, for world-wide sympathies, for tolerance, for the principle underlying the universal brotherhood of man.

You may wonder why we select this day for our Memorial Day for Colonel Parker. It has become a custom not only because he was one of the Civil War heroes (seriously wounded and knowing the terrible cost and suffering of war), but more because he passionately desired that the School should teach the spirit of fellowship and understanding which would make war unnecessary. He believed there was a better way than war to settle differences.

Each Memorial Day at the old Normal School, he brought together all the old soldiers that he could muster, to impress upon us the full significance

of the awful struggle which ended in 1865, and which he believed might have been averted if people had understood each other better—had been more considerate of the needs and rights of all.

Of these old soldiers few are now living, and we believe that we cannot honor them, living or dead, in any better way than by trying to teach the lesson that Colonel Parker wanted us to learn, that of "each for all and all for each." We believe that his own life illustrates and impresses this lesson.

Today we shall hear two of the many poems that he loved to read to us. They carry their own message. We shall then sing the "Battle Hymn of the Republic," which we have all learned to associate with Colonel Parker. After that, members of the High School will interpret, each in his own way, part of Colonel Parker's life and teachings.

Reading (fourth-grade teacher). "Each and All"—Emerson.

Recitation. Hildegard (seventh-grade). "The Children"—Longfellow.

Reading of Essay on Colonel Parker. Harold (eleventh-grade).

Note—This essay was the best and most important contribution to the exercise but on account of its length, it had to be omitted from this book.

Charlotte (tenth-grade). Colonel Parker thought the be-all and end-all of education was social efficiency, and that there was no use in educating people, if they could not be of use. His ideal was an unselfish human being, and he thought that the school should teach every one to be as unselfish as possible. When a little child first comes to school, it is very apt to be thoroughly selfish. It talks when it wants to, and walks around, and does much as it pleases. But it must learn not to talk except when it is called upon, and so it comes to regard the task as the unit that it must work for. Then in time the child grows more mature and learns that it really is not the task that counts, but the grade, and after that it is the school that he works for, and finally for the whole world. One must learn to work for the good of all and not for selfish purposes. Colonel Parker says that those people who have worked for their own ends, special ends, we do not remember; that it is the people who have worked for mankind at large who are always remembered and loved; that "the memory of Alexander, Caesar, Napoleon,—although they were indirectly of great use in progress—and all honor is given them,—is cold and dead in human hearts; while the exalted lives of Socrates, Froebel, Pestalozzi, Horace Mann, John Bright, Florence Nightingale, Washington, and the greatest of all, Lincoln, will ever be bright and pure, the beacon-lights of mankind." Colonel Parker himself was that sort of a man; he was unselfish, and his work was for the good of all. This is what he said in one section of his book, "Talks on Pedagogics":

"I have said these words 'with malice toward none and charity for all.' Fighting for four years, as best I could, for the preservation of the democratic ideal, a teacher of little children for nearly forty years, I believe four things as I believe in God—that democracy is the one hope of the world; that democracy without efficient common schools is impossible; that every school in the land should be made a home and a heaven for children; that when the ideal of the public school is realized 'the blood shed by the blessed martyrs for freedom will not have been shed in vain.'"

Loraine (tenth-grade). Colonel Parker, as Charlotte has told us, believed that education should have social service as its highest aim, and the question is—how are we to attain social efficiency?

Social service, as we understand it, consists in making our own lives and characters of the greatest possible benefit to others. We can become efficient for social service by having for our aim the good of all, putting self aside, and considering always the whole. We should be attentive, should not interrupt, should be quiet and punctual, in order to conduce to the good of the School. Colonel Parker says over and over again, "Each for all and all for each."

In our recitations there should be an effort not only to bring knowledge to the one reciting, but an effort to benefit the whole. It should be an effort in common, each contributing his share to the lesson. Our constant thought should be for the comforts and rights of others. How much better is this way of carrying on our school work than the strife for prizes or marks,—each one trying to outdo the other in gaining approbation from the teacher. This causes jealousy and general bad feeling among the pupils. If this method of work were followed, the love among us would be destroyed.

Colonel Parker says: "Great force of character or genius, combined with selfishness, inordinate ambition, and all-controlling avarice, leads often to great political power, to wealth, to bloody victories, but beyond it cannot lead."

In connection with the Civil War, he says: "If the people of the North and South had known each other in 1861 as they do now; if they had been bound together by railroads and telegraphs as in 1894, no power on earth could have led them to drench the land in fratricidal blood. The foundation of most evil is misunderstanding, distrust, repulsion, or hate—the baneful products of isolation. People, in order to love each other and work for each other, must live together in communities, must be bound together by common interests."

"Our coming together in the morning exercise period, and our being bound together by common interests, is a direct training in citizenship—in the habit of working for the best good of the whole." And again he says: "There never was a bit of true art, music, song, painting, or poetry, destined to immortality, that did not spring from inspiration born of love."

To become efficient in social service, it is very necessary that each one work out alone his or her own problems. "Every step in personal development is through original inference and its practical application. No human being can find a truth for another; the highest aim should be to discover conditions that will enable others to reason in the right direction. The command is, 'Work out your own salvation.'"

Colonel Parker left for us our great word, "Responsibility." If we try to live up to the things which that word stands for, we shall not only be helpful members of our school, but in later life we shall be helpful to the society in which we may be placed. In order to help society in the best way, our love must be broad, and our responsibility unselfish in spirit. It seems

to me that we get a great inspiration from Colonel Parker's words which were brought out by last year's class in the "Melting Pot."

Principal. Our exercises have been long enough, but they would not be complete without a word of encouragement which comes from the reports of the social work which our graduates are doing. In the "Commencement Recorder" you will find the details of some of their work, but I think you would like to know that ten members of the Alumni have found time, while maintaining their scholarship standards, to enter actively into some form of social service outside of their regular college duties.

We do not doubt that there are others of the school family whose work deserves mention because of its practical usefulness in the community to which each belongs. The work need not necessarily be of a kind one can observe and measure.

All who are working unselfishly for good purposes have entered the path of social service. It is a path full of hard work and sacrifice, yet we rejoice, for it is this path, preeminently, which leads to the greatest happiness and satisfaction which the human spirit knows—that of being of genuine service in the world.

Closing Song. "America."

March. "When Johnny Comes Marching Home."

Morning Exercise—Memorial Day

May, 1912



SOLDIERS FROM THE GEORGE G. MEADE POST, DEPARTMENT ILLINOIS
G. A. R. (TO WHICH COLONEL PARKER BELONGED)
WHO TOOK PART IN THE EXERCISE

TOWN MEETINGS

The "Town Meeting," so-called, is held occasionally in the morning-exercise period, and is devoted to free discussion of rules and regulations or of wider civic projects affecting the school community. Among the questions considered at the town meetings have been the following:

Conduct in Morning Exercises.

Need for Rules for Securing Necessary Quiet in the Halls.

Adoption of School Courtesy Code.

Regulations for School Parties.

The Creation of a School Membership in the Big Brother and Sister League.

The Taking Part as a School in the Saving of Niagara Falls.

The Formation of School Humane Societies.

Pupils from the fifth through the twelfth grades take part in the town-meeting discussions. Sometimes the chairman of a committee of pupils presents the question for discussion and gives the report of the committee.

The meetings have always stimulated a sense of social responsibility and have resulted in a better attitude, and always in a sincere even if short-lived attempt, to live up to the higher standards presented. The full possibility of this form of exercise has not been realized—the children have responded actively and cheerfully to all demands, but they have not, as yet, taken the initiative to any great extent in asking for such meetings and discussions. Parts of two town meetings on morning exercises are given verbatim, because they are typical of the character of the discussions carried on in such meetings, and because they are directly related to the subject-matter of this YEAR BOOK.

Morning Exercise—Town Meeting

October 13, 1905

Associate Principal. For four years now we have had these morning exercises, and all of you, when you are asked, are more than willing to take part, but the teachers have been responsible. It seems to me the time has come for you to take up the work, and initiate things for yourselves. I think the plans for morning exercises ought to come from you and that the people who are to take part ought to be selected by you. I suggest that

a committee of pupils be appointed to select the subjects and carry out the plans.

Douglas (tenth grade). I think that is a splendid idea, and I suggest that a committee of pupils be appointed for a while to select the subjects and carry out the plans themselves. I think the pupils would then take an active interest in the work. I think that not only the High School should have a part in the morning exercises, but that every grade ought to contribute—every pupil in the grades should have a part. I don't mean every day, but I don't think the exercises should be confined to the High School. I think every grade should have a part in it sometime.

Charlotte (eighth grade). I think that such a committee ought not to be from the High School, but that the high-school pupils ought to work with the children from the grades.

Emmons (tenth grade). Would it not be better for each grade to have a committee and the teacher from that grade help out on the exercise? I think it would be better than to have a committee from the whole school.

Beatrice (twelfth grade). Why not have one member of the committee from each grade, and have each in that grade suggest to him what he wants to do?

Fanny (twelfth grade). I think the pupils who have taken an interest in the exercise today would be a good committee, but we need time to think about it.

(New topic introduced as to what pupils enjoy in morning exercise.)

Elmer (tenth grade). I enjoy the morning exercises when different people from around the country come and talk to us.

Katherine (twelfth grade). I think one of the most interesting morning exercises is when the little children take part. It is nice to know what they are doing and what they are thinking about.

Joe (tenth grade). I don't care much about that; it doesn't seem to interest me. I like the exercises that Elmer does, where people from around the country come and talk to us.

Elmer (tenth grade). But I think it is our duty to come even when we don't enjoy it. It gives the little people a chance to talk before an audience, and that is always a good thing.

Clarence (eleventh grade). The little children say a lot of things that they feel more than the older ones do.

Emmons (tenth grade). I like the morning exercises. It shows us what the other grades do, and I think we ought to know because we hardly—at least I hardly ever look in to see what they are doing in other rooms.

Katherine (twelfth grade). I think that some of the most interesting exercises are the plays that we have had—just acting out a little story.

Gene (twelfth grade). I think that one of the differences between the exercises here and at the Normal School is that there they were always prepared, and the exercises here are sometimes just what we think about at the time. I didn't care much for the morning exercises at the Normal.

Morning Exercise—Town Meeting

October 26, 1905

(Fifth Grade through High School)

Charlotte (eighth grade). At the last meeting it was suggested that a committee be appointed to arrange for morning exercises. Claudine thinks that instead of having the committee arrange for the morning exercises, the people who want the exercises should arrange for them and then come to the committee and see when they can have them.

Elizabeth (eleventh grade). I should think that each of the grades ought to have a committee and let the committee for each grade decide on the date for the various exercises.

Elliot (tenth grade). That is just about what we have been doing. There has been a bulletin that said that on each day some teacher would give a morning exercise. That is just what has been done, and it has not been a success.

Winifred (eleventh grade). I think each grade should be represented, and then we could ask the teachers for their advice.

Katherine (twelfth grade). I think it would be well to have one of the teachers on the committee until we get started. They have had more experience and have better judgment.

Eighth grade teacher. We have a committee of teachers who have been working very long hours on these very things. I think that many of you would like to hear the report of this committee on what they consider the great principles involved in the morning exercises. The first is: "The success of the morning exercises is fundamentally dependent upon a good community-spirit in all the classes." What do you think that means?

Chester (twelfth grade). What I think you mean is that instead of the morning exercises being formal, some certain people saying a lot of things that they have prepared, that each one is to say what he has to say and not be afraid, and that everything, no matter what it is, should be of interest to everybody else.

Elizabeth (eleventh grade). It seems to me to mean that everybody puts in his efforts for the whole body of children, and not each individual for himself, so that everyone will get the benefit of it.

A teacher read the rest of the report but there were no further remarks by the pupils.

Elliot. I do not think a committee such as has been suggested could have exercises every morning in the week—I believe it would be a little too much to get ready. I know in our debating society it is hard to find subjects, and it only comes every two weeks. If we had a committee of teachers it would help us very greatly.

Elizabeth. As I understand it, the committee was not to decide, but to let each grade select its subject. I think a good way to do would be to have the whole school feel the responsibility of the morning exercises and consider themselves a committee, and when they have something to give, put it down for a specified time.

Elmer (eleventh grade). Is that the object of the committee—just to keep the calendar? Suppose, when the calendar was submitted to the committee, there were five or six open mornings in the month, would it be sensible for the committee to try to fill them? Could the committee ask anybody to be responsible at any time?

Charlotte. I think the whole school ought to be together every morning. It seems to me it would be a good thing for the committee to have some general subjects which would be interesting to every one, and if there was an open morning, just go around and announce it to the different grades and have them think about it.

Paul (eleventh grade). I think we ought to have a representative from each grade in the School and some of the teachers. Hold the whole school responsible for the exercises and then the committee could make arrangements for the open mornings.

Beatrice (twelfth grade). I think that two committees would be rather confusing. I should think we could have a smaller committee, say six, three teachers, and three of the pupils from the upper grades—one from the fifth, one from the sixth, and one from the seventh, and then two others, one from the eighth grade, and one from the High School. Have the grades themselves elect the committee, and have the committee changed from time to time, so that everyone would have a chance to work.

Lucy (fifth grade). I think it would be better to just have one committee; have the whole school suggest and the committee carry it out.

Gene (twelfth grade). I would have the children from the fifth grade up elect these members of the committee, no matter from what grade they were elected. What we are working for, is to make everyone responsible for the morning exercises. I make a motion that three representatives be elected by the grades, from the fifth grade up, and that three members of the faculty be elected by the faculty, and that this committee of six arrange all the dates for the morning exercises and all the school be responsible for the subjects.

(This motion was seconded and carried.)





EXERCISES FOR SPECIAL DAYS

The Significance of Special Days

Christmas

"Where Love Is." Adapted from Tolstoy

The Santa Claus Party

The Christmas Services

The Nativity Story

Thanksgiving

Introduction

Selected Programs of Exercises

Three Thanksgiving Days: Greek, Hebrew and American

Patriotic Exercises: Washington's and Lincoln's Birthdays

THE SIGNIFICANCE OF SPECIAL DAYS

The various aspects of the spirit which is the moving power of the school life are represented during the course of the year in the special exercises. Daily morning exercises are the outcome of some particular interest of a group or an individual; but special exercises stand for certain conceptions which give inspiration to the life of the community and determine its characteristic direction and qualities. All special exercises have the backing of tradition of some sort. It may be one of our deep-seated racial traditions which supplies the suggestion of validity for the celebration, or it may be a mere school tradition which gives sanction to the content and form of the exercise. Both sorts are opportunities for the clarification of ideals and the expression of beliefs held by the community as a whole. Year by year they restate and verify the spiritual aspect of growth, giving it expression in the most beautiful and appropriate forms we can command.

Christmas, Thanksgiving, patriotic days, stand for love, for the pulse of gratitude, for national spirit; it is the renewed discovery of the individual, year by year, of stability and unity in our spiritual life, symbolized by these exercises, which gives them their greatest value. Field Day is a general exercise of prime importance, when the gymnastic work of the year culminates in a whole day given to celebrate our belief in the scientific and regular training of the body.

May Day we express, in more or less traditional forms, some of the sentiments to which our Anglo-Saxon inheritance entitles us. It is a day greatly beloved by the children, both old and young. The Valentine's-Day observance resolves itself into a party, in which every one receives some token of affection. Hallowe'en is the day for ghosts and elves; songs, stories, games and plays, in which the imagination is appealed to in all of the fun-making, tend to redeem this reiterated holiday for the children.

The Commencement-Day exercises are described in another place, in the book, under the heading, "School Unity and School Policies."

CHRISTMAS EXERCISES

The Spirit of Giving

In preparation for Christmas, 1912, the following letter was sent to patrons and friends of the Parker School:

The School is this year making a greater effort than ever before to impress upon the children the beauty of the Christmas spirit. The children have heard Tolstoy's story, "Where Love Is, There God Is Also," and throughout the month we hope to keep before them the essential meaning of the Christmas season—that it is a time of kindly feeling towards one's fellows. We should be glad if not one child saw any of its unlovely features—hurry, worry, ostentation, perfunctory giving. We wish every child to feel that a gift is nothing unless genuine affection prompts it—nothing, unless into it the giver has put a part of himself. The giver's own work is of course the best, but at least careful, thoughtful selection is indispensable. This means that a child should be allowed to give very few gifts.

We believe that you will agree with us that Christmas "lists" by means of which the parents meet large responsibilities in a business-like way, have no rightful place in the child's growing years, if we are to preserve the true spirit of Christmas giving. We are very anxious to have no Christmas gifts given in the School which are in any way forced or suggested, and school collections for presents often have this result. We ask you to co-operate with us in having the children understand that if they have not the time or inclination to give in the right way, Christmas gifts in the School, that what they really can give of themselves in helpful influence, in service, is even more appreciated and often represents more genuine giving.

We hope that it will be understood that we want to encourage and help in every possible way the *true spirit of giving*, but we want to remove those artificial incentives to universal exchange of Christmas gifts which mar this season of good-fellowship and place upon children, prematurely, the burden of adult responsibility. Let us keep our children natural, simple and genuine, and protect them as long as possible from the sophistication which certainly has no place in the Christmas festival.

Believing that every parent will understand the spirit of this appeal for co-operation, we are

Yours most sincerely,

COMMITTEE ON CHRISTMAS GIVING

The foregoing letter indicates that in common with all thoughtful adults, our teachers believe that the matter of Christmas giving merits our serious attention. We desire to keep all the beauty of the Christmas spirit, and combat all the unwholesome tendencies of extravagance and ostentation which present-day conditions enhance. The morning

exercise is an ever-ready avenue for exercising positive influence upon the School as a whole in any such matter as this. Mrs. Thomsen read to the children Tolstoy's "Where Love Is." The reading was very moving to the susceptible minds of the eighth-grade boys and girls. Later in the year they gave a play which they had made from the story,—the play which concludes this article. This study was undertaken at the instance of the children—that is, their suggestion that they make a play from the story was adopted tentatively, in the hope that a prolonged study of such a piece of literature would insensibly imprint upon their characters some of the sweet and gentle Christ-like spirit. But this plan was, in the teacher's mind, as I say, tentative. The great religious experience of this lonely cobbler in his little basement-shop had inspired in the children a deep reverence. Could they maintain that reverence through daily hard work on the style and composition? The story covers several weeks before the great day when Christ himself visited Martuin. All this they must bring into the compass of one day and one scene. Much that is told as narrative they had to turn into dialogue. They must read other of the Gospel stories to find Tolstoy's own eloquently simple phrases. They must try to imitate his folk-expression where wholly new sentences were needed. Martuin's first three speeches and others through the play were made in this way.

For this class such work meant many hours of concentration of an unusual sort. Symptoms of flippancy or boredom would mean a reaction, and were watched for by the teacher. Such symptoms would be a signal for abandoning the work. No such signal came.

When the play was finished, parts must be assigned and rehearsals begun. These children were unusually inexpressive. Their speech was appallingly unlovely. We were planning several performances, so that every child had a part, and must share in the drudgery of constant rehearsal, with hard drill for clear beautiful speech and easy natural action. Was their love for the play they had chosen to make, sufficient to lift this drudgery to a piece of service? The event proved that it was.

I recall a discussion in rehearsal which seems to me significant. In the story, Christ himself spoke to Martuin, saying: "Look to-morrow on the street. I am coming." The question was whether the audience should hear Christ speaking, or whether only the poor cobbler's action and facial expression should convey the impression. Their

choice of the latter alternative was a triumph of good taste, but I speak of it because the tone of the discussion was so naïve and so sincere.

Work on making the play began before Christmas. There were four performances, including one at the Child Welfare Exhibit in June. All this work was done on a solemnly religious type of story. It must have been abandoned had so high a plane of feeling proved impossible for so extended a time. The gentleness and reverence with which the whole class regarded it showed conclusively that it was a type of literature wonderfully adapted to the adolescent age.

"Where Love Is"

(Cobbler's shop. Two men seated, talking.)

Ivan. God keep you, Martuin, I must start back to Troitsa in a few hours.

Martuin. Ivan Dmiettrevitch, do not go. I am a lonely man. I sit here in my little basement-shop. I look out through my window to the street. All day I see only boots passing by. The rest of the people is hidden. But by the boots, which I have made and mended, I recognize the owners. Yonder, now, goes a water-carrier. But only to see boots passing. What kind of a life is that? Do not leave me.

Ivan. Martuin, you are changed. Seven years ago you were a happy man.

Martuin. Seven years ago I had a wife and child.

Ivan. These things are in God's hands, Martuin.

Martuin. My little Kapitoshka! He was the last. When my wife died, my sister would have taken him. But I felt sorry for him. I said: "It will be hard for my little Kapitoshka to live in a strange family. I shall keep him with me." Why could not God have taken me, an old man, instead of my beloved only son!

Ivan. But Martuin—

Martuin. I have no desire to live. I only wish I was dead. That is all I pray God for. I am a man without anything to hope for now.

Ivan. You don't talk right, Martuin. We must not judge God's doings. The world moves not by your skill, but by God's will. God decreed for your son to die—for you to live. Consequently, it is for the best. And you are in despair because you wish to live for your own happiness.

Martuin. But what shall one live for?

Ivan. We must live for God, Martuin. He gives you life, and for His sake you must live. When you begin to live for Him, you will not grieve over anything, and all will seem easy to you.

Martuin. But how can one live for the sake of God?

Ivan. Christ has taught us how to live for God. You know how to read. Take your Testament and read it; there you will learn how to live for God. Everything is explained there. *(Goes to shelf and takes down Bible. Sits and slowly turns pages.)* Listen—

"And one of the Pharisees desired Him that He should eat with him and He went into the Pharisee's house and sat down to meat. And, behold, a woman in the city which was a sinner, when she knew that Jesus sat at meat in the Pharisee's house, brought an alabaster box of ointment.

"And she stood at His feet behind Him, weeping, and began to wash His feet with tears, and did wipe them with the hairs of her head, and kissed His feet and anointed them with the ointment.

"Now when the Pharisee which had bidden Him saw it, he spake within himself, saying, 'This man, if he were a prophet, would have known who and what manner of woman this is that toucheth him; for she is a sinner.' And Jesus, answering, said unto him, 'Simon, I have somewhat to say unto thee.' And he saith, 'Master, say on.'

"There was a certain creditor which had two debtors; the one owed five hundred pence and the other fifty. And when they had nothing to pay, he frankly forgave them both. Tell me, therefore, which of them will love him most?"

"Simon answered and said, 'I suppose that he, to whom he forgave most.'

"And He said unto him, 'Thou hast rightly judged.'

"And He turned to the woman, and said unto Simon, 'Seest thou this woman? I entered into thine house, thou gavest me no water for my feet; but she hath washed my feet with tears and wiped them with the hairs of her head. Thou gavest me no kiss, but this woman, since the time I came in, hath not ceased to kiss my feet. My head with oil thou didst not anoint, but this woman hath anointed my feet with ointment. Wherefore, I say unto thee, her sins, which were many, are forgiven, for she loved much; but to whom little is forgiven, the same loveth little.'

God keep you Martuin! (*Martuin is lost in thought and does not notice Ivan as he stops reading. Ivan watches his friend for a moment and then rises and lays the Bible, open, on the bench beside him. He goes. After a pause, Martuin takes up the Bible and reads to himself. Presently he reads aloud to himself.*)

Martuin. "Thou gavest me no water for my feet, thou gavest me no kiss; my head with oil thou didst not anoint."

(*Long pause, while he reads to himself. He looks up, as if he heard voice.*)

Who is here? (*Pauses and listens.*) Christ Himself will visit me to-day? (*Pauses—thinking.*) Well, such things have been. (*Works and watches window.*) Pshaw! I must be getting crazy in my old age. Stephanuitch is clearing away the snow, and I imagine that Christ is coming to see me. I was entirely out of my head, old dotard that I am. I will give him some tea. By the way, the samovar must be boiling by this time.

(*Lays down hisawl; rises from his seat; puts samovar on table; makes the tea; taps on the window. Beckons to Stephanuitch.*)

Come in and warm yourself a little. You must be cold.

Steph. May Christ reward you for this. My bones ache.

Martuin. Don't trouble to wipe your feet. I will clean it up myself. We are used to such things. Come in and sit down. Drink a cup of tea. (*Filling both his own cup and his guest's.*)

Steph. You have plenty to do, Martuin Avdyeitch?

Martuin. Yes. People's shoes must be mended.

Steph. And they like to come to you. You always keep your word.

Martuin. One must try to be honest, Stephanuitch.

Steph. You keep looking through the window. Are you expecting anyone?

Martuin. Am I expecting anyone? I am ashamed even to tell whom I expect. I am, and I am not, expecting some one. But one word has impressed itself upon my heart. Whether it is a dream or something else, I do not know. Don't you see, brother, I was reading yesterday the Gospel about Christ, the Batiushka; how He suffered; how He walked on earth. I suppose you have heard about it?

Steph. Indeed I have, but we are people in darkness; we can't read.

Martuin. Well now, I was reading about that very thing—how he walked upon the earth. I read, you know, how he came to the Pharisee's, and the Pharisee did not treat him hospitably. Well, and so, my brother, I was reading yesterday about this very thing, and was thinking to myself how he did not receive Christ, the Batiushka, with honor. If, for example, he should come to me, or any one else, I think to myself, I should not even know how to receive him. And he gave him no reception at all. Well, while I was thus thinking, I fell asleep, brother, and I heard someone call me by name. I got up, the voice, just as though some one whispered, said: "Be on the watch, I shall come tomorrow." And this happened twice. Well, would you believe it, it got into my head. I scold myself, and yet I am expecting him, the Batiushka. You see, I have an idea that when the Batiushka went about on this earth, he disdained no one, and had more to do with the simple people. He always went to see our simple people. He picked out his disciples more from among our brethren—sinners like ourselves, from the working class. He says: "He who exalts himself shall be humbled, and he who is humble, shall become exalted." "You," says he, "call me Lord, and I," says he, "wash your feet." "Whoever wishes," says he, "to be first, the same shall be servant to all. Because," says he, "blessed are the poor and humble, the kind, the generous."

Come, now, have some more tea.

(Stephanuitch makes sign of cross, turns up his glass, and rises.)

Steph. Thanks to you, Martuin Avdyeitch, for treating me so kindly, and satisfying me, soul and body.

Martuin. You are welcome. Come in again. Always glad to see a friend.

(Stephanuitch goes out, Martuin, working, looks out of the window again. Sees woman and child. Gets up and goes to door.)

Hey, my good woman! Why are you standing in the cold with the child? Come into my room, where it is warm. You can manage it better. Right in this way. *(Woman enters, carrying baby.)* There, sit down, my good woman, nearer to the stove. You can get warm and nurse the child.

(She sits.)

Woman. I have no milk for him. I myself have not eaten anything since morning.

(Martuin startled, sets a bowl of soup on the table.)

Martuin. Sit down and eat. (*She sits and eats.*) Haven't you any warm clothes?

Woman. Now is the time, friend, to wear warm clothes, but yesterday I pawned my last shawl for a twenty-kopec piece. When I started out this morning, it was warm, but now it is terribly cold. (*Martuin goes to the cupboard and takes out a coat.*)

Martuin. Na! It is a poor thing, yet you may turn it to some use.

Woman. May Christ bless you! He must have sent me to your window. I am a soldier's wife. It is now seven months since they sent my husband off, and no tidings. I lived out as a cook. The baby was born. No one cared to keep me with the child. This is the third month that I have been struggling along without a place. I ate up all I had.

Martuin. We have all tasted hunger, we poor. It is a terrible thing.

Woman. I have just been to the merchant's wife, and they promised to take us in. I thought this was the end of it, but she told me to come next week. I got tired out. She lives a long way off. My little one would have frozen to death. And He, the Lord Himself, led me to look through your window and you to take pity on me.

Martuin. Indeed he did that. I have been looking through the window, my good woman, not without cause. I am expecting Christ. You see, this morning, only a little while ago, I heard a voice. You know, I had been reading about Christ when he was on earth, and how the rich Pharisee desired the Lord to eat with him. And then he thought about himself, and there was not the least care taken of his guest. And who was his guest? The Lord, Himself. And I was wondering. If He had come to me, should I have done the same way? And then, my friend,—I myself do not know whether I was dreaming or awake—I heard a voice call me, and it whispered in my ear, "I am coming." And so I have been stitching all day, and at the same time looking through the window. I keep thinking of Christ and his deeds. And you will think I am foolish, but I am expecting him, the Batiushka.

Woman. All things are possible. (*Rises to go.*)

Martuin. Take this, for Christ's sake. (*Gives her money.*) Redeem your shawl.

Woman. May the Lord bless you! (*Leaves.*) Martuin sits down to work.

(*Enter old woman. Sets apple basket near the door, while she shows a pair of shoes to Martuin.*)

Old Woman. Good day, neighbor Martuin.

Martuin. Good day to you. What is it?

Old Woman. My daughter's old shoes. Can you mend them once more? She needs new ones, but bread is dear. God help the poor.

Martuin. Well, it can be done.

(*Boy reaches in and snatches apple. Old woman catches him, and drags him down the steps.*)

Old Woman. You worthless rascal!

Boy. I didn't take it. What are you licking me for?

Martuin. Let him go, babushka. Forgive him for Christ's sake.

Old Woman. I will forgive him, so that he won't forget it till the new broom grows. I am going to take the little villain to the police.

Martuin. Let him go, babushka, he will never do it again. Let him go, for Christ's sake. (*Old woman lets go of boy.*)

Martuin (to boy). Ask the babushka's forgiveness, and don't you ever do it again. I saw you take the apple.

Boy (crying). Forgive me, babushka.

Martuin. That's right, and now, here's an apple for you. (*Gets an apple from basket and gives it to the boy.*) I will pay you for it, babushka.

Old Woman. You ruin them that way, the good for nothing. He ought to be treated so that he will remember it for a whole week.

Martuin. Eh, babushka, babushka, that is right, according to our judgment, but never according to God's. If he is to be whipped for an apple, then what do we deserve for our sins? Remember the parable of the man who forgave a debtor all that he owed him, and how the debtor went out and began to choke one who owed him. God commanded us to forgive, else we, too, may not be forgiven. All should be forgiven, the thoughtless especially.

Old Woman. That's so, but the trouble is that they are very much spoiled.

Martuin. Then we who are older must teach them.

Old Woman. That's just what I say. I myself had seven of them. Only one daughter is left. Here my strength is only so so, and yet I have to work. I pity the youngsters, my grandchildren. How nice they are! No one gives me such a welcome as they do. Little Aksintka won't go to anyone but me. Of course it is a childish trick. God be with him.

(*Woman just about to lift bag to her shoulder.*)

Boy. Let me carry it, babushka. It is on my way.

Martuin. That's right.

Old Woman. That gives my old bones a rest. (*They leave.*)

(*Martuin goes back into the house. Takes lamp, lights it, works. Turns boot around. Looks at it. Puts it away. Takes Testament.*)

Martuin. But the Lord, he did not visit me. (*Reads half aloud, very slowly.*) "For I was anhungered, and ye gave me meat; I was thirsty and ye gave me drink. I was a stranger and ye took me in; naked and ye clothed me; I was sick and ye visited me; I was in prison, and ye came unto me. . . . Verily I say unto you, inasmuch as ye have done it unto the least of these, my brethren, ye have done it unto me." (*Looks up from the Bible and repeats.*) "Inasmuch as ye have done it unto the least of these, my brethren, ye have done it unto me." (*Joyfully, to himself.*) Then my dream did not deceive me. It was the Lord who visited me.

Santa Claus Party

The Year Book of June, 1912, contained an account of the Christmas Toy-Shop and its service in promoting unselfishness in the children by their sharing with others. That work was continued and additional interest was given to it the following Christmas.

December 4, 1912, a messenger came to Miss Cooke at morning exercises, with a Marconigram (on regulation blank) from Santa Claus at Kondiak, North Pole. (The message was really sent by one of the boys from his amateur station at home and received at the School.) In this message, Santa Claus asked the privilege of renting the shop of the School for two weeks, and the terms, if the request could be granted. The children listened with delight and enthusiastically endorsed Miss Cooke's reply that the School would gladly lease the shop on Santa's own terms and would sign the contract. The wireless next morning brought Santa's answer that the contract was on the way, and that he was so rushed with business that he wished to order additional dolls, doll's beds, sheets, mattresses, and sleds. This extra work was promised and included in the contract signed by Miss Cooke. The next two weeks were busy ones. All the primary grades worked on the promised extras. The first and second grades made simple candies which were to serve as gifts, and the jellies and grape juice made in the fall, were inspected. These were found in good condition, fit for the mother's gift. The children of the grammar grades could not be invited to the Santa Claus party, to their bitter disappointment, because of the lack of space in the gymnasium, but they wished to have a share in the preparation, and during the last week of the term, as there was opportunity, they came to the domestic-science kitchen and popped corn in sufficient quantity to supply the children of the primary grades. Other children made packages of the corn by wrapping it in paper napkins and tying the packages with gaily-colored string. These were counted out by grades, and generous allowance made for probable visiting children; and the supply for each grade was put into a large green or red stocking plainly marked. These in turn were placed in Santa Claus' huge pack, this being done that each child might receive a gift from Santa Claus.

The kindergarten children had much pleasure in trimming a small tree with bright ornaments. They put on it some of the smaller gifts chosen from those which they had planned to send with the tree to the children's hospital.

The high-school graduating class and the eighth grade were invited to the Christmas party with the four lower grades and the kindergarten. They assembled in the gymnasium where the gay little kindergarten tree was placed in the middle of the floor. As always there were guests, younger brothers, sisters, cousins or friends, who

sat down with the children of the school on the rugs around the room. The feeling of good-fellowship was most contagious, and the small guests were as much at home as our own children.

The children danced in groups around the tree, there were skipping games, and then jolly Christmas songs. During the singing of St. Nicholas, the faint tinkle of sleigh bells was heard. The effect upon the children was electric, and their interest was so intense as it sounded louder and nearer, that their voices were stilled and in the quiet, Santa's voice was heard admonishing his team to "Whoa, Dasher and Dancer" and all the rest of the historic names. There was more jingling and stamping, and finally Santa Claus, the traditional Santa Claus with his white beard, his twinkling eyes, his red fur-trimmed suit and the bulging pack on his back, came in puffing. This most agreeable part is usually played by one of the teachers, or sometimes by one of the alumni who is with us to take part in the family fun. Last year one of the former teachers, much beloved of the school, was chosen. His first inquiry, after a greeting to the children and a rapturous reply from them, was as to the identity of the School, "Is this the Francis W. Parker School?" When the children assured him that it was, he produced a huge order-book and found the place where there were entries of toys. "I have here an order for twenty sleds. Are they ready?" A small spokesman came forward, "They are all ready and are like this one, and we want them to go to the Orphans' Home." The other items were checked in the same manner, and then Santa Claus, who had to hurry off to another school, suddenly remembered that he had some stockings in his pack for these children, and gave them out by grades as labeled. One child from each grade received the stocking assigned for it, holding a little conversation with Santa Claus at the same time, thanking him for the gifts and asking again anxiously whether the articles made to order were really satisfactory. Being reassured the children were satisfied, and after Santa Claus had said, "Good-bye, a Merry Christmas to all," the children with their guests went back to their own rooms—or their homes, with the happy confidence that they had made some one else's Christmas happier, and had done the thing which they had contracted to do. This feeling of something well done, undoubtedly adds to their joy in the real Christmas season of the next day.

The Christmas Service

"And a little Child shall lead them"

THE BIRTH OF CHRIST, St. Luke 2:7-16

First-Grade Child

SONGS FROM "CHRISTMAS MORN," A Musical Narrative *J. Burgmein*

- a. The Hallowed Story, Fifth Grade to Eighth, High School Girls
- b. The Shepherds, Fifth Grade to Eighth
- c. The Magi, High School Girls
- d. The Children, Seventh Grade to Twelfth
- e. O Joyful the Story, Fifth Grade to Eighth, High School Girls

CHRISTMAS CAROL, poem by *Christina Rossetti*

Eleventh-Grade Boy

CHRISTMAS SONG, canon in two voices

Reinecke

High-School Girls

CHRISTMAS POEM, *Louise Imogene Guiney*

Twelfth-Grade Girl

CHORUS FROM CHRISTMAS ORATORIO

Saint-Saens

Fifth Grade to Twelfth

ANTIPHONS OF VESPERS IN PREPARATION FOR CHRISTMAS

Twelfth-Grade Boy

O come, all ye faithful,
 Joyful and triumphant,
 O come ye, oh come ye to Bethlehem.
 Come and behold him,
 Born the King of angels;
 O come, let us adore him,
 Christ, the Lord.

Sing, choirs of angels,
 Sing in exultation,
 Sing, all ye citizens of heav'n above;
 Glory to God
 In the highest;
 O come, let us adore him,
 Christ, the Lord.

FRANCIS W. PARKER SCHOOL
 Friday, December 20, at 11:00 o'clock

Note—This program is printed very carefully on soft, translucent Japan fibre paper, with red lines and initial letters. The effect is beautiful. The soft quality of the paper prevents rustling.

Preparation for the Christmas service includes much that is difficult to describe. It is perhaps sufficient to say that the music and readings are planned and studied, in so far as it is possible, as an expression of the spirit of good will.

For the service, the assembly room is decorated in green and silver. There are two large, beautiful fir trees, whose dark foliage shows plainly through a network of delicate silver lines. Small electric lights shine like silver stars on the branches, and furnish most of the illumination for the room. Evergreen and holly soften the lights on the side walls and ceiling, and make the background for the chorus. The children come in quietly, the girls in white dresses, during a quiet improvisation on an old carol. A little child begins the service by telling the gospel narrative. At the close the guests rise with the children to sing the final hymn.

The Nativity—By Douglas Hyde

Explanations and details of the presentation of the Christmas play must be deferred until they can be supplied by the teacher of dramatic work, but the present Year Book would be incomplete in an essential element without some brief comment at least upon the moral qualities of the play, its effect upon the children who act in it, and the audience.

The spirit of the play is both poetic and genuinely childlike, and its form is simple to the point of conventionalization. The spiritual aspiration and humility of all the characters are expressed without affectation or overemphasis, and all the action is extremely simple and quiet. The play is presented with entire reverence and directness by the various casts, each child making his best effort to be clear and truthful in thought and action.

There have been various types of audiences. The little children of the School, the upper grades, parents and friends, public-school children, the children of the half-orphan asylum, a group of Italians from the neighborhood of the Commons, have all come to see it, and the effect upon them seems to be very nearly the same. There have been a few slight attempts to applaud at the end of the play, but they were quickly subdued by the audience as a whole. The play evidently leaves an impression, to say the least, of solemnity, spiritual sincerity and loveliness.

The Christmas Music

A description of Christmas would be inadequate without some word of appreciation of the Christmas music. This, perhaps, can be given best by quoting from a letter written by a visitor to the School, Christmas 1912.

"I came home from the Christmas service at your school with a heart so full of gladness that I must say a word to you.

"First, I was happy because the true idea of the meaning of Christmas comes to these children, not so much by what they say as by what they do about it. This, it seems to me, runs like a living stream—beginning with the preparatory work of the 'Santa Claus Shop'—growing ever clearer, through the beautiful 'Nativity Play,' and culminating in the Christmas music. I cannot believe that it is possible for children to sing these songs as I heard them today without feeling that there is left with them a deep, holy, happy impression which will be recalled whenever this music is heard.

"I realize that in the daily life of this school, music stands for a reality in a child's life; it is not simply an *art* to be cultivated, it is a thing of the heart and life that cannot be so well expressed in any other form. The Reinecke Christmas Canon was especially beautiful in its simple rendering and beautiful harmony.

"It was good, too, to have the privilege of joining with you all in the grand old 'Adeste Fideles.' I am glad the great works of the past have a place here, and that parents and children, teachers and friends, may share the good things for which the School stands, not only at Christmas, but at all times.

ALICE H. PUTNAM."

Christmas Service for the Little Children

1912

WHY DO BELLS FOR CHRISTMAS RING?	Kindergarten to Fourth Grade	Root
THE BIRTH OF CHRIST	First Grade Child	St. Luke 2:7-16
AS JOSEPH WAS A-WALKING	Group, First and Second Grades	English Carol
YE SHEPHERDS, ARISE	Fourth Grade	Reinecke
TWENTY-THIRD PSALM	Miss Walker	
O LITTLE TOWN OF BETHLEHEM	Third Grade	Phillips Brooks
CHRISTMAS CAROL	Second Grade	Christina Rossetti
O COME, LITTLE CHILDREN	Second Grade to Fourth	German Folksong
CHRISTMAS SONG	Third and Fourth Grades	Gade

And in the words of Tiny Tim, "God bless us, every one."

This serious little service was not definitely planned until a day or two before it was given. During December, in the literature classes, various Christmas poems were read by the children, or read to them by the teacher.



PREPARATION FOR CHRISTMAS IN THE FIRST GRADE

The favorite of the second grade was the Rossetti carol, the third preferred the poem by Phillips Brooks. They were kept as a surprise for Miss Cooke, and as a contribution to the service in case they were needed. The songs also were prepared in an atmosphere which was free from self-consciousness and the anticipation of display. They were learned to sing to other children and to their parents when opportunity should come, and when it came were given in a spirit of self-forgetfulness and serious effort.

The Story of the Nativity

Preparation for Christmas in the First Grade

Immediately after Thanksgiving, the first-grade children began to prepare for Christmas. In their own room they made and filled with cotton, a mattress and pillows for a large doll's bed, which had been mended in the shop. For this bed they hemmed the sheets and pillow slips, and embroidered a blanket. They trimmed a Christmas tree with cornucopias which they had made and decorated; they dipped candles, fastened them upon a tree and lighted them to see

if their work was good. After all was finished the Christmas tree was given to the Children's Memorial Hospital and the doll's bed was sent to a kindergarten.

The Christmas spirit is diffused through all the children's work. Christmas boxes and baskets are decorated; Christmas songs are sung; Christmas legends are told and the story of the Christ-child is learned.

Story of the Christ-Child—St. Luke, Ch. II, 7-21

The story of the Nativity is taught because it is a beautiful piece of literature, which describes a series of incidents in language so clear and simple that a little child can comprehend them, and the events are portrayed so graphically that he sees them as he would a painted picture. Although there are many legends and stories connected with Christmas, the version given by St. Luke interprets the Christmas story more beautifully than any other. It is our belief that it is the highest expression of the spirit of the season, and tends to develop in the child an ethical and spiritual sense.

A description of the country around Bethlehem is given, in order that the children may have a better understanding of the story, and as Eastern cities are so different from our own, a picture of Jerusalem is shown, with its flat-roofed houses and its thick walls surrounding the city. In the picture caravans are seen going to and from the city. It is explained to the children that the camels are the only animals that can make the long journeys across the desert and go days without water, and pass through sand storms; and that asses are only used in traveling short distances, from one city to another, or from the hills to a city or town. It is suggested that the people perhaps have come to pay their taxes, or to bring food, or that they may have come from distant countries with silks and spices.

Now that the children have a picture of the country and some idea of the customs of the people, they are ready for the story of the Nativity. The version used is that found in the second chapter, the seventh through the twentieth verse of St. Luke. The word Mary is used instead of "she" in the seventh verse. The story is presented to the children as a whole, and each group of events is discussed separately. Then the story is written on the blackboard, and as they go over it picturing the details again and again, the written copy assists them in committing it to memory. This is the method used in developing the story.

All the children are able to repeat the story, but not with the

same degree of feeling; some are more imaginative and more expressive than others, but all seem to catch much of its real spirit. The children are led to realize that this is the most beautiful story that has ever been written; that it is true. And gradually there comes a feeling of love and reverence for it, and the thought that it should be told in the most beautiful and sacred manner.

In order to have the children enter more readily into the spirit of the story, perfect quiet is brought about, so that all may be led to a higher mental plane; and then through the influence of pictures, stories and conversation, an atmosphere of sympathetic understanding, even perhaps of awe, is created. In imagination they travel across the sea to the little town of Bethlehem; they go to the inn where the Christ-child was born.

They read:

"And Mary brought forth her first born son, and wrapped him in swaddling clothes and laid him in a manger because there was no room for them in the inn."

The children are told that Mary and Joseph had come here to pay their taxes. They had found crowds of people. They had gone from one inn to another, but at last they had come to a place where cows, asses and sheep were kept; and here they rested and the little child was born. It is explained that Mary wrapped her little son in many folds of cloth, and that even now in some countries, people wind folds of cloth around their tiny babies. The children look at a picture and they see Joseph standing, looking down at Mary, and the little child lying in a manger near her.

The thought is now directed to the hillside where the shepherds are keeping watch over their flocks. The children learn that the shepherds stay with their flocks night and day, for the sheep might run away and get lost, or wolves might come and kill them. It is pleasant out there on the hillside, for the shepherds sing songs, tell stories, and watch the moon and the wonderful stars. Sometimes a star flashes across the dark blue sky, and then again one seems to drop down to the ground. The night in the story was different from other nights; it was a wonderful night, for the story says:

"And there were in the same country shepherds abiding in the field, keeping watch over their flocks by night.

"And lo, the angel of the Lord came upon them, and the glory of the Lord shone round about them; and they were sore afraid."

The angel spoke gently and the shepherds forgot to be afraid and listened, for it says:

"And the angel said unto them, Fear not: for, behold, I bring you good tidings of great joy, which shall be to all people. For unto you is born this day in the city of David a Savior, which is Christ the Lord."

By this the angel meant: "Do not be afraid, for I am bringing good news to every one in the world, a child has been born who will teach all people how to be kind, gentle, helpful, and truthful." In explaining the following verse where the angel says:

"And this shall be a sign unto you; ye shall find the babe wrapped in swaddling clothes, lying in a manger,"

the children were told that the thought of the angel was, that if the shepherds found the babe lying in a manger, they might be certain that this was truly the Christ-child.

The next verse tells of the shepherds seeing not only one but many angels, singing and praising God.

"And suddenly there was with the angel a multitude of the heavenly host praising God, and saying, 'Glory to God in the highest and on earth peace, good will toward men.'"

In the last verse the angels meant that there should be no more war upon the earth, and that all men should become friends. Then the picture changes, and in imagination the children see the shepherds alone with their flocks. The wondrous light has faded from the sky and the angels have gone.

"And it came to pass, as the angels were gone away from them into heaven, the shepherds said one to another, 'Let us now go even unto Bethlehem, and see this thing which is come to pass, which the Lord hath made known unto us.'"

"And they came with haste and found Mary and Joseph, and the babe lying in a manger.

"And when they had seen it, they made known abroad the saying which was told them concerning this child.

"And all they that heard it wondered at those things which were told them by the shepherds."

A picture is shown to the children of the shepherds kneeling before the child, and another picture showing the babe in the manger near the mother. They see Joseph looking at Mary and the child, while the shepherds stand with bowed heads. It is made plain that after the shepherds had seen the Christ-child they felt certain that everything the angels had said was true, and that they went away and told everyone what they had heard and seen. They told of their visit to Mary and Joseph, and of finding the little Christ-child lying

in the manger. The shepherds' story was so wonderful that the people did not know what to think or say:

"But Mary kept all these things, and pondered them in her heart."

This means that Mary thought over and over again of the visit of the shepherds; of the story they told her, and of the wonderful child which God had given her.

The last verse of this story gives a picture of the shepherds going back to their flocks:

"And the shepherds returned, glorifying and praising God for all the things that they had heard and seen, as it was told unto them."

And we see them going up the hillside, singing songs of praise and thanking God, because they had heard the angels and had seen the Christ-child.

The children now leave the shepherds with their flocks and see in imagination three kings riding upon camels. They too, have come to see the Christ-child. They had traveled many miles to see him; they had crossed deserts and plains; they had passed through cities and towns and had found the little child lying in a manger—in a stable. These kings had come because it had been said many, many years before that a king would be born, and they had been watching
• for a sign. At last they had seen a wonderful star in the east and had followed it. It led them to Bethlehem and stood over the place where the little child lay. The kings brought precious gifts to this wonderful child. They worshiped him and went away rejoicing.



THANKSGIVING EXERCISES

Instinctively we are not unlike all those peoples who have expressed themselves with devotion in songs of thanksgiving at the harvest time, or who have praised the Giver in some impressive religious ceremonial. But in experience we who dwell in cities differ widely from the true children of the soil. We who do not plant the seed and care for the growing corn and watch the clouds and wind and rain, we who do not gather in the harvest, cannot appreciate with the same emotion what the harvest means. However, we cannot see the summer, with its rich gifts, draw to a close without some feeling of gratitude. But we are impelled to higher forms of expression of this feeling only as we multiply our experiences with nature. This we can do in some measure, even in a city.

The varied garden activities and the annual exhibition of garden products at the "County Fair"* are vital experiences in the lives of the children. These activities, together with the morning exercises on the world crops of the year and the scientific and economic problems involved, foster a genuine appreciation of the Thanksgiving service.

Sometimes this service takes the form of a ceremonial, with processional and music, and occasionally it is a representation of some historical form. The programs which follow illustrate more fully the variation:

THANKSGIVING PROGRAM FRANCIS W. PARKER SCHOOL

1901

I Will Praise Thee	
Come, Thou Almighty King	
The Feast of Tabernacles, Levit. 39th to 43rd	Col. Parker
We Plough the Fields	
Prologue	Miss Forte

*In early October an afternoon is spent in the open, at the so-called school "County Fair." Parents and children, big and little, gather to see the crop and general exhibit. Each grade has appointed tables on which are heaped the ponderous pumpkins and the many flowers. There are tables for baked goods, made from the newly learned recipes; others for jellies and preserves which the girls put up during the summer; others on which are shown collections of flowers, sea-weeds, shells, post-cards, photographs, dolls, etc., that have been made during the past summer. There are screens and tables for needlework, where dresses, laces, embroidery, and sewing of all kinds show what the summer's leisure time and industry have produced.

Everybody goes to the flower garden to play a game at testing himself on the names of all the flowers; then he plays with all the pets—birds, cats, rabbits, dogs, ponies, raccoons, goats, etc., that have come from the homes to spend a day at school to show themselves to everybody. Then the young gardeners sell herbs, vegetables, flowers, jellies, candies, and needlework, if they wish to, and use the income according to their own discretion. A committee of judges is appointed from the faculty and children, to generously distribute blue ribbons where they are deserved.

Iroquois Festival	Second and Third Gr
Dionysiac Festival	Ninth G
(Dialogue and music composed by pupils of Ninth Grade)	
Old English Harvest Home	Seventh
Bavarian Harvest Customs	Eighth
Vintage Customs in the South of France	Fourth
The First Thanksgiving in America	Fifth and Sixth G
Harvest Hymn	
The Children's Offering	
Harvest Song	

THANKSGIVING EXERCISES

1905

PART I

THANKSGIVING SERVICE

(*Eleven-thirty o'clock*)

SENTENCE: The Lord shall give his people the blessing of peace.

PRESIDENT'S THANKSGIVING PROCLAMATION

SENTENCE: The eyes of all wait upon Thee,
That Thou mayst give them their meat in due season.
Thou openest Thine hand and fillest all things living
plenteously.

CANTICLE OF THE SUN Fifth Grade P

ANTHEM: Blessed is he that considereth the poor and needy;
The Lord shall deliver him in time of trouble.

RESPONSIVE READING FROM THE PSALMS Eighth Grade P

CHORUS IN UNISON

The earth is the Lord's and the fullness thereof;
The world and they that dwell therein.
For He hath founded it upon the seas,
And established it upon the flood.
Who shall ascend into the hill of the Lord?
Or who shall stand in his holy place?
He that hath clean hands and a pure heart,
Who hath not lifted up his soul unto vanity,
Nor sworn deceitfully.
Lift up your heads, oh ye gates:
And be ye lift up, ye everlasting doors:
And the King of glory shall come in.
Who is the King of glory?
The Lord, strong and mighty,
The Lord, mighty in battle.
Lift up your heads, oh ye gates,
Even lift them up, ye everlasting doors,
And the King of glory shall come in.
Who is this King of glory?
The Lord of hosts, He is the King of glory.



THE GODDESS OF THE HARVEST

PART II

DRAMATIC PRESENTATION OF SCENES FROM THE FIRST
THANKSGIVING AT PLYMOUTH

(Twelve-fifteen o'clock)

I: "We Plough the Fields."

DRAMATIC PRESENTATION

Sixth Grade and High School

- I. The Linen Bleaching.
- II. Preparing the Thanksgiving Feast.
- III. The Arrival and Entertainment of Massasoit and members of his Tribe.
- IV. The Thanksgiving Feast.

PART III

THANKSGIVING LUNCHEON

(Twelve-forty-five o'clock)

THANKSGIVING SERVICE

1908

SESSIONAL: "Come, ye Thankful People, Come"	Elvey
HYMN: "Blessed Is He"	Nares
READING: "Thou Mother with Thy Equal Brood"	Whitman
BEST SONG	Richter

REVIEW OF OUR NATIONAL GRATITUDE . . .	<i>Members of High Scho</i>
READING: The President's Proclamation	
READING: "Recessional"	<i>Kiplin</i>
HYMN: "To Thee, O Lord"	<i>Stor</i>

Especially useful as a beautiful literary expression of the conception which even the younger children have of Thanksgiving is St. Francis's *Cantic of the Sun*. The simple expression of a seventh grade pupil given below on the significance of Thanksgiving embodies with obvious similarity, the same ideas expressed by St. Francis. The children readily adopt, with genuine understanding, this more beautiful literary form.

Phoebe (seventh grade). If I were not educated, I think that the two seasons that would influence me most are spring and autumn. I think that in some way of my own I would celebrate those two seasons, even if they had never been mentioned to me.

The reason I think the spring would influence me is that at that time everything is changing; the weather is changing, it is getting warm; the animals are getting new coats; even the birds are changing; the spring birds are coming, and the winter ones are going back; the land is changing too; it is becoming green, and no matter where it is, most everyone is happy; the crops are coming up. I think that would make me set a day apart from other days, to pray that these crops might turn out well. I think that the first two that I would pray to would be the sun and the rain. I would pray for the sun to shine on the crops and make them ripe, and would pray for the rain to water them, because food is necessary to life. Then in the autumn I would feel very thankful, and would set apart another day in which to give my thanks for everything. I don't think I would think of Thanksgiving day, but I would be thankful for a great many things. Some of them are fire, sun, the moon, the stars, the rain, grass, beautiful birds, flowers, and mother and father. In fact, I would feel thankful for everything good and beautiful.

THE CANTICLE OF THE SUN

St. Francis of Assisi, 1182-1226

O most high, Almighty good Lord God, to Thee belong praise, glory, honor, and all blessing.

Praised be my Lord with all His creatures, and especially our brother the sun.

Who brings us the day and who brings us the light; fair is he and shine with a very great splendor. O Lord, he signifies to us Thee!

Praised be my Lord for our sister, the moon, and for the stars, through which He has set clear and lovely in Heaven.

Praised be my Lord for our brother, the wind, and for air and cloud, calms and all weather, by the which Thou upholdest life in all creatures.

Praised be my Lord for our sister water, who is very serviceable unto us and humble and precious and clean.

Praised be my Lord for our brother fire; through whom Thou givest us light in the darkness; and he is bright and pleasant, and very mighty and strong.

Praised be my Lord for our mother the earth, the which doth sustain us, and keep us, and bringeth forth divers fruits and flowers of many colors, and grass.

Praised be my Lord for all those who pardon one another for His love's sake, and who endure weakness and tribulation; blessed are they who peaceably shall endure, for Thou, O Most High, shalt give them a crown.

Praise ye and bless the Lord, and give thanks unto Him, and serve Him with great humility.

Three Thanksgiving Days—Greek, Hebrew and American

FIRST DAY

Monday, November 27, 1911

Prologue (given by a teacher).

Is not autumn the climax of the year, and is it not the fulfillment which the other seasons promise? Of all people, those who till the ground most keenly feel this truth. It is the harvest toward which all their efforts have been bent; it is the harvest that determines their future. At the garnering worry is at end, happiness is assured, and gladness fills the farmer's heart. He looks at the rich yield, and, remembering the small seed that he sowed, and the many dangers that threatened the crop, he marvels at the power of life, and his soul reaches out in thankfulness to his God, who has nurtured and warmed the earth and quickened the seed. So it has been ever since man first put his hand to the plow and found the friendly earth reward him in fruits. Age after age, at every return of the garnering, men in various fashions, according to their race and their time, have put on rich raiment and have filled their arms with earth's bounty and have gone to the altars of their gods to give thanks and to share the harvest. In awe and in deep solemnity the Hebrews, after the threshing of the wheat, drew near to Jehovah in praise. To close the gathering in of the grapes, the Greeks, in lightness of heart, frolicked gaily before Dionysos, the "bringer of joy," the "ripeners of mellow fruits." And who shall judge how man can best express his love?

Today, and tomorrow, and the next day, we plan to body forth, in three different ways, the joy and the love and the thankfulness that man feels at the harvest of blessings that the year has borne. We admonish you not to look upon what is done on this platform as a play for your amusement, but as you behold the Thanksgiving of the Greeks today, of the Hebrews tomorrow, and of the Americans the day after, join with them in their rejoicing and send up your hearts to the heights.

DIONYSIAC FESTIVAL

(Given by Fifth Grade)

*(Enter three people bearing gifts.)**First.* My vines hung so full that the very trees drooped.*Second.* Our cellars will not hold the wine.*Third.* Nay, they are overflowing, and the very ground is soaked with Dionysos' bounty.*First.* Praise to Dionysos, cry I!*Second.* This will be a joyful festival.*Third.* Hither come other worshipers. Behold Milo's great jar!*(Enter three other people, bearing gifts.)**First.* Ah, Milo! Generous man!*Milo.* Shall I be niggardly with him who gave us all these blessings?*Fourth.* When was there ever a time that Dionysos was not lavish with his kindness?*Fifth.* Aye. But for him we should not have tables, couches, jars, the banquet, the dance, and all the pleasant fruits. We have Dionysos to thank for all these.*Second.* Pile up your gifts; he deserves them all!*Third.* Heap high his altar!*(Enter four other people, bearing gifts. One wears a satyr mask.)**Sixth.* Greetings, neighbors!*Milo.* A satyr! A satyr!*(All cry out.)**Fifth.* Art a messenger from our ivy-treasured Dionysos, O goat-hoofed?*Fourth.* It is Demipho!*Seventh (taking off his mask).* I snatched it from the vines as I passed
(Placing mask on altar.) To thee, uproarious Dionysos, do I dedicate it!*Eighth.* Oh, the rocks and the caves of Nysa!*Ninth.* And the dancing nymphs!*Sixth.* And the romping satyrs!*Fourth.* Oh, the laughter in the high woods! If I could have lived in that joyous time, when Dionysos led the dance on the windy mountain tops!*Eighth.* But the adventure of the pirates! That was the great marvel!*Tenth.* Give ear to the story:

Concerning Dionysos, the son of the renowned Semele, shall I sing how once he appeared upon the shore of the sea unharvested, on a jutting headland, in form like a man in the bloom of youth, with his beautiful dark hair waving about him, and on his strong shoulders a purple robe. And came in sight certain men that were pirates, in a well-wrought ship, sailing swiftly on the dark seas. Ill Fate was their leader, for they, beholding him, nodded to each other, and swiftly leaped forth and hastily seized him, and set him aboard their ship, and they minded to bind him with grievous bonds. But his fetters held not, and the withes fell from his hands and feet. Then

sat he smiling with his dark eyes, but the steersman saw it and spake aloud to his companions:

"Fools, what god have ye taken and bound? Surely this is Zeus, or Apollo of the Silver Bow, or Poseidon; for he is nowise like mortal man, but like the gods who have mansions in Olympos. Nay, come let us instantly release him upon the dark mainland, nor lay ye your hands upon him, lest, being wroth, he rouse against us masterful winds and rushing storms."

So spake he, but their captain rebuked him with a hateful word: "Fool, look thou to the wind, and haul up the sail, and grip to all the gear, but this fellow will be for men to meddle with. Methinks at last he will tell us who his friends are, and concerning his wealth, and his brethren, for the god has delivered him into our hands."

So he spake, and let raise the mast and hoist the mainsail, and the wind filled the sail, and they made taut the ropes all round. But anon strange matters appeared unto them: first there flowed through all the swift black ship a sweet and fragrant wine, and the ambrosial fragrance arose, and fear fell upon all the mariners that beheld it. And straightway a vine stretched hither and thither along the sail, hanging with many a cluster, and dark ivy twined around the mast, blossoming with flowers, and gracious fruits and garlands grew on all the thole-pins. Meanwhile, within the ship, the god changed to the shape of a lion at the bow; and loudly he roared, and in midship he made a shaggy bear; there stood it raging, and on the deck glared the lion terribly. Then the men fled in terror to the stern, and there stood in fear around the honest pilot. But suddenly sprang forth the lion and seized the captain, and the men all at once leaped overboard into the strong sea, shunning dread doom, and there were changed into dolphins. But the god took pity upon the steersman, and kept him and gave him all good fortune, and spake, saying: "Be of good courage, sir. Dear art thou to me, and I am Dionysos of the noisy rites."

Hail thou child of beautiful Semele!

All (at the end of the hymn). Evoe! Evoe!

(Priest enters, followed by an assistant.)

Priest. Encircle the altar, ye who have shared Dionysos' bounty.

All (as they run to the altar). Dionysos! Dionysos!

Ninth. The prince of joy!

Seventh. Lover of the dance!

Sixth. Ripener of mellow fruits!

Priest. Lift the hymn.

BACCHIC SONG

Where art thou, god of the clustered vine?

In high Olympos, quaffing the wine

From golden bowl, while Apollo sings,

And the muses dance, and the rich hall flings

A glist'ning light?

Refrain.

And now your heavy cymbals ring,

And still your "Evoe! Evoe!" sing!

Or dost thou wander the mountain-sides,
 Calling the fawn that in forest hides
 And leaping panther and timid ass
 To follow thee down and dancing pass
 To thy temple white?

Refrain.

Or dost thou walk the vineyard ways
 To plump the grapes and spread the haze
 Of mellow ripeness on the earth,
 That loving men may feel no dearth
 Of thy rich fruits?

Refrain.

Now, hear us, O Bacchus fair!
 Behold our hands and hear our prayer!
 Rich wine doth soak thy altar-sod
 To be a perfume to the god
 Who gave the grape.

Refrain.

Sweet juices drip from the heavy pile
 Of luscious autumn fruits, the while
 The fire leaps up, the smoke ascends,
 And with it all in madness blends
 Our Bacchic Song.

A Woman.

Put on thy ivy crown,
 O Thebes, thou sacred town!
 O hallowed house of dark-haired Semele!
 Bloom, blossom, everywhere,
 With flowers and fruitage fair,
 And let your dancing steps supported be
 With branches from the oak
 Or the green ash tree broke;
 Shaking his joyful wand, let each advance,
 And all the land shall gladden with the dance.

(All dance off.)

SECOND DAY

THE FEAST OF TABERNACLES

This scene was prepared with the assistance of a Chicago Rabbi, and of a gentleman—an accomplished Hebrew scholar—who has children in the School. Great care was taken to arrange the exercise so that it should conform to ancient Jewish custom, yet should avoid elements which were too sacred to be used in a school festival. The children were selected not only because they could sing the unaccompanied chant, and could suitably represent Jewish people, but also

because they would enter sincerely and reverently into the spirit of the festival.

The group consisted of a boy from the second grade, a girl from the fifth, a girl and three boys from the High School, and two post-graduate boys.

In reading the report, it must be kept in mind that the use of the bread and wine—a weekly observance in the orthodox Jewish household—while it is the origin of the Christian Holy Supper, has not, to the Jewish Church, any other symbolism than that of representing the fruits of the earth, and is in no sense a sacrament.

(Stage arranged to represent booth used by Jewish family during week of feast. Sides and ceiling of lattice covered with palms. Long table with white cloth over red one, set with jug of wine and cup, loaf of bread, and small dish of salt. Seats around table for each member of household. During prologue no one on stage.)

Prologue. Joy be to you who are gathered here today to celebrate, with thankful hearts, the harvest festival!

And where, think you, was kept the first Thanksgiving day which history records for us?

Not on the bleak shore of New England, when our Pilgrim forefathers gave thanks for prosperity, peace, and safety; not in Old England, or France, or Italy, when the youths and maidens made merry over the bringing in of the grain and the gathering of the grapes; not even in sunny Hellas, when men and women danced and sang praise to Dionysos, who had made glad their hearts with wine.

Hundreds of years before all these—before Rome was founded, or the Greeks had conquered Troy—a thousand years before the birth of Christ, on the hills of Palestine, the Jewish nation kept its harvest festival, the Feast of Tabernacles.

This feast had to them a double meaning, for in it they not only gave thanks for bounty received, but also called to mind the time when, having been delivered from a life of slavery in Egypt, they wandered for forty years in the wilderness, until they came into the promised land—dwelling during these forty years in no settled homes, but in tents, or in rough shelters built of boughs.

Therefore, during the week of the feast, every family in Israel dwelt in a booth of branches, which they built in their gardens or on the flat roofs of their homes, or in the streets before their doors, for so they were commanded by the Lord in the holy Book of the Law.

In building these booths, they were commanded to leave open one side, in token of the hospitality which every Israelite extended to all who came to his door, even to the stranger within his gates. In weaving the branches over the roof, there were always left small openings through which could be seen the sun by day and the moon and stars by night, that the people might

remember that howsoever dark and overshadowed the situation in which they then were, yet if they would look up, they could always find light.

For every day of the week of the feast there was prescribed a certain observance of prayers, chants, and readings from the Book of the Law, which took place in the home, the father of the family and the male members of the household reciting the various portions of the service. But the first and the last day of the feast were Sabbath days, and in them people did no servile work, but betook themselves, with their offerings, to the temple, where the priests led them in songs of praise, read to them from the scroll of the Law, and offered long and heartfelt prayers of thankfulness to Jehovah.

During the many years when the judges and the kings ruled the Jewish people, it was the custom for the male members of the family, and sometimes also the women and girls, to go up to Jerusalem to keep the three great feasts of the year—the Feast of the Passover, which is our Easter time; the Feast of Shabuoth, our Pentecost, commemorating the giving of the Ten Commandments; and the Feast of Tabernacles, which was the most joyful time of the year, so that it was often spoken of as "The Feast." People from distant places visited their relatives or friends in the city of the king, and all Jerusalem was filled with rejoicing. For days before the feast, the roads leading cityward were traveled by bands of people bearing palm branches and offerings of fruit, or leading animals for the sacrifice. As they walked they sang chants of praise and thanksgiving, and so beautiful were these psalms that to this day no more perfect and fitting expression of thanksgiving has ever been written, and their words, translated into every tongue, form part of the thanksgiving festivals of people all over the world.

Since the time when Rome conquered Jerusalem, the Hebrew nation has become scattered over the face of the earth. Its members have been persecuted by those calling themselves by the name of One who was Himself a Jew. They have suffered loss of country, of liberty, of life, yet to this day do the Israelitish people follow in the way that was commanded them of old; to this day do they observe their national feasts, and on the fifteenth day of the seventh month, according to the Hebrew calendar—about three weeks earlier than our Thanksgiving day—they celebrate the Feast of Tabernacles. Even those who cannot themselves build a booth of their own go at least once a day, for the week of the feast, to the booth of a neighbor, or the one in their synagogue, to join in the celebration. Where the unfavorable climate prevents using a booth out of doors, one is built within the house. Not everyone may be able to bring his own thanksgiving emblems, the citron and palm branch, but he may use those of another, or the priest may wear the lulav and eserick, as the palm and fruit are called, for his people. Even the lowliest exercises such hospitality as he can, though he may have but a bit of bread to offer his guests; but is not bread the chosen symbol of the gifts for which, at this season, rich and poor alike return thanks?

And now, as we follow the observance, according to the ancient Jewish custom, of the season of Thanksgiving, let us keep in mind that we are part of that procession of humanity which, through all the ages, has gathered up at its appointed season, to its appointed place, to make formal acknowledgment of the gifts it has received from that Power which is, itself, Love and joy.

(Family enters from door, r. Father leads, followed by men of group, father and two men bearing lulavs in left hands and esericks in right. Mother and children come last. Father takes his place in center at back of table; at his right two men, the further one the lulav-bearer; same at left, the lulav-bearer in this case being leader of the psalm. He stands at end of table. At his left, in front of table, is small boy; at opposite end the mother, little girl at her right in front of table, corresponding to position of boy. All stand in place during prayer and psalm.)

Father. Now let our prayer ascend unto Thee, O Lord, for Thou art the sanctifier and savior of Israel.

On this day of the feast we will take the golden fruit of the goodly citron tree, to praise Thee, whose law is more precious than gold. With one branch of the lofty palm we praise Thee, who art most righteous and most exalted; with two branches of the beautiful waving willow, we praise Thee, who causest the uttermost sphere to move; and with three branches of myrtle we praise Thee, who didst guide the three patriarchs, Abraham, Isaac and Jacob.

With hands washed in purity, take we the perfect fruit and the perfect branches; for how, with impurity upon us, shall we come before Thee, who art purity; or how, with offerings imperfect and unlawfully obtained, shall we stand in Thy presence, who wilt consume as with fire that which is imperfect and unlawful?

And as the goodly fruit hath scent and taste, so are there among these people those who study the law and observe Thy precepts; and as the palm beareth fruit that hath a sweet taste and no scent, so are there among them those that observe Thy precepts but know not the Book of the Law; and as the myrtle hath a sweet scent but a bitter taste, so are there among them those that meditate upon the law, yet is their palate bitter; and as the willow hath neither taste nor scent, so are there those that are perverse and stupid. Yet as the palm that bears fruit covers those that bear none, so do those that are perfect shield those that are not, that all may stand before Thee, who makest even the wrath of man to praise Thee.

Blessed art Thou, O Lord.

(During first and last verses of psalm, palm branches are waved up and down, east, west, north and south.)

Grown Son. Join ye all in the psalm of thanksgiving, and wave ye your palm branches, in token that in the celebration of this joyful feast all men, whether high or low, whether from the east or from the west, from the north or from the south, may unite to praise the Most High.

All. O give thanks unto the Lord: for he is good; for his mercy endureth forever.

O give thanks unto the God of gods: for his mercy endureth forever.

O give thanks unto the Lord of lords: for his mercy, etc.

Son. To him who alone doeth great wonders:

All. For his mercy, etc.

Son. To him that by wisdom made the heavens; to him that stretched out the earth above the waters:

All. For his mercy, etc.

Son. To him that made great lights, the sun to rule by day, the moon and stars to rule by night:

All. For his mercy, etc.

Son. To him that smote Egypt, and brought out Israel from among them with a strong hand and with a stretched out arm:

All. For his mercy, etc.

Son. To him which led his people through the wilderness.

All. For his mercy, etc.

Son. To him which smote great kings and gave their land for an heritage, even an heritage unto Israel, his servant:

All. For his mercy, etc.

Son. Who giveth food to all flesh.

All. For his mercy endureth forever.

O give thanks unto the God of Heaven, for his mercy endureth forever.

(From Psalm 136.)

(*All sit except father and children.*)

Father. Bring hither the Book of the Law.

(*Children bring scroll, and stand, one on each side of father, holding it unrolled, while he reads.*)

Father. Hear ye the commandment which the Lord gave to our forefathers, as it is written in the book of the Levites:

And the Lord spake unto Moses, saying,

Speak unto the children of Israel, and say unto them: When ye be come into the land which I give unto you, and shall reap the harvest thereof, then shall ye bring a sheaf of the first fruits of your harvest unto the priest.

And he shall wave the sheaf before the Lord, to be accepted for you; on the morrow after the Sabbath the priest shall wave it.

* * *

And ye shall eat neither bread nor parched corn, nor green ears, until the selfsame day that ye have brought an offering unto your God; it shall be a statute forever throughout your generations in all your dwellings.

* * *

And when ye reap the harvest of your land, thou shalt not make clean riddance of the corners of thy field when thou reapest, nor shalt thou gather any gleaning of thy harvest; thou shalt leave them unto the poor and the stranger: I am the Lord your God.

* * *

And the Lord spake unto Moses, saying:

Speak unto the children of Israel, saying: The fifteenth day of this seventh month shall be the Feast of Tabernacles for seven days unto the Lord. On the first day shall be an holy convocation: Ye shall do no servile work therein. Seven days shall ye offer an offering, made by fire unto the Lord. On the eighth day shall be an holy convocation unto you; and ye shall offer an offering made by fire unto the Lord; it is a solemn assembly; and ye shall do no servile work therein.

* * *

And ye shall take you on the first day the boughs of goodly trees,

branches of palm trees, and the boughs of thick trees, and willows of the brook; and ye shall rejoice before the Lord your God seven days.

And ye shall keep it a feast unto the Lord for seven days in the year. It shall be a statute forever in your generations; ye shall celebrate it in the seventh month:

Ye shall dwell in booths seven days; all that are Israelites born shall dwell in booths.

That your generations may know that I made the children of Israel to dwell in booths, when I brought them out of the land of Egypt. I am the Lord your God. (*From Leviticus 23.*)

(*Children replace scroll; father arranges bread and wine.*)

Father. Blessed art Thou, O Lord our God, King of the Universe, who hast granted us life, sustained us, and permitted us to celebrate this joyous festival.

Let us praise God with these symbols of joy, and thank Him for the blessings which this Feast of Succoth brings to us. May God's providence, which cared for our fathers in their wanderings, also protect us.

His bounteous hand satisfies all needs. May our kindness to others show our gratitude to Him whose kindness endureth forever. (*Pours wine.*)

Blessed art Thou, O Lord our God, King of the Universe, who hast created the fruit of the vine.

(*Sips the wine and then passes around table to left. Dips bread in salt.*)

Blessed art Thou, O Lord our God, King of the Universe, who causeth the earth to yield food for all.

(*Tastes the bread and passes a piece to each. After eating bread, father goes to each child, in turn, and with his hands upon the child's head, pronounces blessing. All rise.*)

Father (to first child). May the God of our fathers bless you! May He who has guided us unto this day lead you to be an honor to our family.

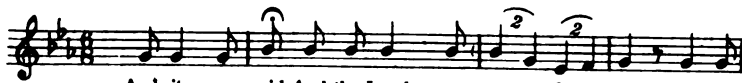
(*To second child.*) May He who has protected us from all evil, make you a blessing to Israel, and to all mankind. Amen!

(*All sing the chant through once, and then go out, singing it the second time.*)

Chant. And it was said, and the Lord remembered Jacob, and redeemed him from the arm that was stronger than his.

Blessed art thou, O Lord!

Thou hast redeemed Israel.



And it was said, And the Lord pro- tect- ed Ja - cob, And re-



deem - - ed him from the arm that was



stronger than his. Blessed art Thou O Lord, Thou hast re-deemed Is-ra-el.

THIRD DAY

Wednesday, November 29, 1911

The little children came into the assembly room and stood during the processional. The girls of the upper grades led, singing "Come, Ye Thankful People, Come," followed by the seventh- and eighth-grade boys bearing sheaves of grain, baskets of fruit, or sprays of autumn leaves and flowers. They were followed by the tenors and basses. The seventh- and eighth-grade boys went up the steps to the stage, which had as a background dull green curtains, and was furnished with a large plain chair at one side and a bench in the center. As the boys took their places on each side of the stage, Marguerite, one of the graduates, came in and stood by the chair. The basses and tenors, who were in groups on each side of the steps, sang an opening sentence, "The eyes of all wait upon Thee, that Thou mayst give them their meat in due season. Thou openest Thy hand and fillest all things living with plenteousness." The boy who carried grain then delivered the following speech as he placed his grain against the bench:

Alfred (seventh grade). Behold the wealth of the field! How the valleys have put forth their strength and fruited. The sons of men ask for bread, and the ground is clothed with richness. The slender stalks are bent, and the heads hang down with fatness. Our bins are running over. These kernels shall make the strength of man's body and the fortitude of his heart. Shall not our souls be lifted up with joy? Shall not our mouths sing? And let not *one* lack nourishment when the earth is full. Then bring the sheaves in token of our joy, and bestow comforting grain in proof of brotherhood.

Then came a child with fruit, followed by children carrying leaves and flowers, making a carefully arranged mass of color and form. Each child in turn gave his offering.

Russell (seventh grade). Bring the fruit of the trees and the wealth of the vine! The earth has brought forth beauty, and the garden of the world has grown food. We that dwell in plenty, we that sit in full storehouse, how blessings are heaped upon us! Set them forth, that we may see how abundant is our good fortune! Heap up the fruits and let him that is anhungered and has not, come hither and feast with us. And let the whole earth sing "hallelujah"!

Ogden (seventh grade). There grow up from the earth fruit and grain for the support of man's body, but what shall feed his soul? Look forth upon the hills and the meadows, how the earth is caparisoned in beauty! The great forests flame, and every clod has blossomed. The eyes behold, and the shades of sorrow and the burden of dullness are lifted! Bring hither, then, leaves and flowers. Deck the barren places. Let the dark city and the bleak houses bloom! And sing for joy that our minds are open to beauty, and sing that there is so fair a world to feast upon.

The speech of Marguerite then summed up the whole:

"What shall I bring in gladness? Not grains that nourish man, nor fruits that solace him, nor flowers that cheer him. But does the earth labor and bring forth harvest, and do her works perish utterly? Does man consume them and go down to the grave barren? Rather do earth's seeds take root in men's hearts and there come to fruition in joy and gentleness and love. And are not these to be prized above all other things? Of these, then, I bring the memory to crown our heaped-up blessings. And my heart sings in joy for my brother man, with feet that run upon errands of mercy, with hands that serve in loving charity, with souls that suffer long and are kind, with minds that soar up into the high places of the universe."

This was followed by the "Benedicte," "Oh, all ye works of the Lord, bless ye the Lord; praise Him and magnify Him forever," sung antiphonally by the older boys. The children then read the following litany* responsively, after which the boys led the recessional, "We Plow the Fields."

LITANY OF THANKFULNESS

For days of health,
 For nights of quiet sleep,
 For seasons of bounty and of beauty,
 For all earth's contributions to our need,
 Good Lord, we thank Thee.

For our country's shelter,
 For our homes,
 For the joy of faces and the joy of hearts that love,
 Good Lord, we thank Thee.

For our power of growth,
 For longings to be better and do more,
 For ideals that ever rise above our real,
 Good Lord, we thank Thee.

For opportunities well used,
 Good Lord, we thank Thee.

For our temptations and for any victory over sins that close beset us,
 For the gladness that abides with loyalty and the peace of the return,
 Good Lord, we humbly thank Thee.

For the blessedness of service,
 For the power to fit ourselves to others' needs,
 Good Lord, we thank Thee.

For our necessities of work,
 For burdens, pains, and disappointments, means of growth,
 Father, we thank Thee.

For all that brings us nearer to each other, nearer to ourselves, nearer to Thee,
 For life,
 We thank Thee, O our Father.

*Composed by one of the teachers at the School.

PATRIOTIC EXERCISES

The patriotic exercises are too important and too valuable to be left out of a year book, the purpose of which is to suggest the best uses of the morning-exercise period. One typical exercise of this kind—that of Memorial Day—is given under “School Unity and School Policies,” but on account of lack of space the yearly observances by the School of the birthdays of Washington and Lincoln are not illustrated by verbatim reports.

When planning our Washington and Lincoln celebrations, we have tried to keep in thought at least these two distinct aims: first, to give the children a more intimate acquaintance with the lives of these great leaders and a greater appreciation of the price they paid in their heroic struggles to forward the ideas in which they so firmly believed; second, to emphasize the inherited duty to the community-welfare which their illustrious example and sacrifice demand of us. A brief mention of some of the Washington and Lincoln exercises may prove helpful and suggestive.

Washington’s and Lincoln’s own writings furnish us, fortunately, with real literary material for our exercises, and for supplementary prose and poetry we use only those selections which belong to the first rank, for we believe that there is time in school to deal only with literature of recognized superiority.

For our Washington and Lincoln celebrations we have occasionally had excellent speakers come and address the School. For our Lincoln exercises we have on several occasions had some one who actually knew the great Emancipator talk to us, and always on Lincoln’s birthday we endeavor to have the Gettysburg speech.

Programs

WASHINGTON’S BIRTHDAY—1912

Song. “America”

Recessional. *Kipling.* (Selected because it contains a warning often cited by Washington)

Reading. From Webster’s “The Name of Washington”

Reading. From speech made by Edward Everett (Showing Washington’s plea for the preservation of the Union)

Prophecy. From Washington’s “Farewell Address”

WASHINGTON'S BIRTHDAY—1909

Theme. Love of Country

(Washington had perhaps more than any other man true love of country, and the School thought it could not pay tribute to his memory in any better way than by emphasizing through a story just what love of country means)

Poem. "Breathes There a Man," by Scott

Reading. "Man Without a Country," by E. E. Hale

Song. "America"

LINCOLN CENTENARY—1909

A Series of Four Exercises

February 8. American Frontier. Seventh Grade

Life of Frontiersmen: Home, recreations, types of people, development under these conditions, short account of travel between England and America, interdependence of pioneers, etc.

February 9. Colonisation. Eighth Grade

Song. "O God of Hosts"

Reading. "Thou, too, Sail On"

Theme. Immigration—The Immigrants' Attitude Toward America

Reading. "America, the Great Melting Pot"

February 10. Lincoln's Idea of America. High School

Song. "Star-Spangled Banner"

Reading. Extracts from the speeches and letters of Lincoln were read to show the kind of a man he thought the ideal American should be

February 11. Lincoln as an Inspiration and as an Ideal. High School

Gettysburg Speech. Lincoln

Ode. Lowell. Given at Harvard, in 1865, in memory of the men who died in the Civil War

Reading. Beecher's speech in memory of Lincoln

Poem. Whitman's "My Captain"



OTHER TYPES OF MORNING EXERCISES

Exercises by Outside Speakers

Group Exercises

Story Telling Exercises

Poetry Exercises

Recitals

EXERCISES BY OUTSIDE SPEAKERS

There have been some morning exercises in which the children have taken no active part. Some have been given by patrons of the school, members of the faculty, and alumni; and others have been presented by persons not connected with the School. Among the latter there have been experts and specialists in the arts, sciences, government, and reform.

Many of these exercises have been connected with grade activities. The twelfth grade at one time gave a series of exercises on the general subject of courtesy, in support of a courtesy code drawn up by a joint committee of pupils and teachers; and as a part of this series, the managing director of the Playgrounds' Association of Chicago, was invited to talk to the School on how the play activities of these centers develop character and citizenship.

The study of Chicago's problem of sanitation, by the eighth grade, led to a talk by the president of the Sanitary District. The interest aroused by morning exercises on astronomy given by the sixth grade brought about a series of talks by Professor Forest Ray Moulton, of the University of Chicago.

Of similar character, though not direct outcomes of the grade activities, are such exercises as those on Greece, Eskimos, and prehistoric animals by scientists and travelers; a talk on the Corn Products Industry, by a patron of the School; a series of experiments with electricity by an alumnus; and an exercise on the History of Mathematics by a member of the faculty.

Through many of these exercises, the School has been put in touch with national and civic crises and events. Some years ago, the apparently imminent danger of legislation permitting the destruction

Niagara Falls, prompted a member of the faculty to explain the situation at a morning exercise. An immediate reaction was obtained which resulted in the School's joining the American Civic Association, and in the writing of letters to congressmen by the children, and, at their insistence, by their parents. A problem of our city was brought to the attention of the school at a critical time by an exercise on the question of Garbage Disposal, when the city was planning to change

its methods of doing this work. The subject was discussed by Miss Mary E. McDowell, of the University of Chicago Settlement, who presented the results of her studies in cities of this and other countries.

The sympathy of our pupils for less fortunate people has been aroused and has borne fruit through exercises at which persons engaged in philanthropic work have spoken to the school. Memorable among these were the exercises devoted to the Big Brother and Sister League of Chicago. Mr. Henry W. Thurston told of the methods and plans of this association, and about a year later, another speaker emphasized its work for girls. Immediately after the first address groups of the fourth grade, by making and selling candy to the children of the School, earned enough money to purchase a membership in the league. Volunteer groups were formed in the upper grade for a like purpose.

On several occasions the School and its pupils have served the cause of education elsewhere, when aroused by such exercises as those describing the Hindman School in Kentucky, and the work of the American Indian League. At these times there was a sale of articles made by these people.

As typical of another group of exercises we might mention the following: reports of a vacation's experience in Yellowstone Park; an automobile tour through historic places in the eastern part of our country; a talk by Mr. Enos Mills on the Wild Life of the Rockies and a similar account by Mr. Cy de Vry, Superintendent of the Zoölogical Gardens in Lincoln Park.



GROUP EXERCISES

Definite efforts have been made to bring the morning exercises to touch with the children's natural interests outside the school. The different grades have been canvassed, and the pupils asked if there were subjects about which they would like to have exercises given. Airships, submarine boats, vacation experiences, Indians, and electricity were among the topics which were requested. On one occasion, a group of high-school boys on their own initiative, took up the subject of airships, planned an exercise, executed drawings, and made an interesting presentation.

The children's interests in collections have been recognized, and profitable exercises have resulted. On a chosen morning, every child who wished to exhibit a collection of stamps, coins, stones, pictures, or curios, brought it to the School, and set it up in some class room. There were different rooms for different kinds of collections. People who wished to see the exhibits of coins went to the coin room; those who wished to see stamps went to the stamp room. The plan had the decided advantage of breaking up grade lines and bringing children of different ages into small social groups.

At other times, we have had the children divided, according to their strongest interests, into groups for games, music, charades, and story-telling; at other times they have chosen between hearing a talk on some science subject and listening to reading of some good story. The chairmen of these groups have sometimes been children, sometimes teachers.

As the study of French and German begins in the first grade, the form of divided exercise has been to have all the pupils of

School who understand French meet in one place for French exercises, songs, and dramatizations, while the German groups met in the other place for a similar exercise in German.

On one day a week, the school divides at morning exercise period into two groups, so that the primary and upper grades may have separate music rehearsals for the morning-exercise singing.

At one time a question box was placed in the hall, and children placed in it requests for exercises, or questions which they would like to have answered in morning exercises. The plan failed because no one undertook the complicated direction which was necessary.

STORY TELLING EXERCISES

They seemed a little hazy in the Ivanhoe class about Shadrach and his famous brethren of the fiery furnace. "What Bible stories do you know?" brought hesitating replies. Charles had seen some moving pictures of Samson the week before. "There's something," mused Mary, "about David in the lions' den." "I can't remember it very well," drawled Edna contemplatively, "but I have a Child's Bible, and I know there's a story about seven good queens and seven wicked queens, and the seven wicked queens blew out all the lights, and the seven good queens couldn't see their way home." Evidently we had not kept our lamps trimmed and burning. These children had missed part of their birthright.*

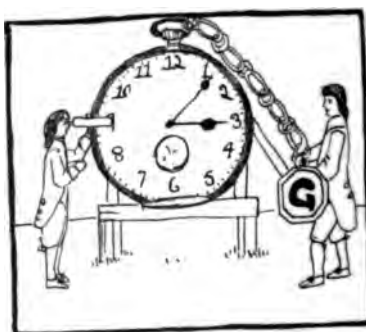
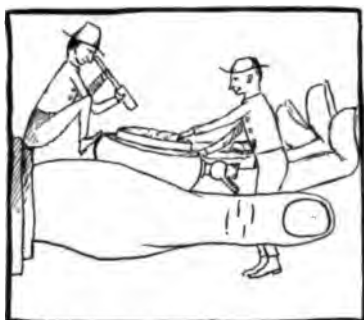
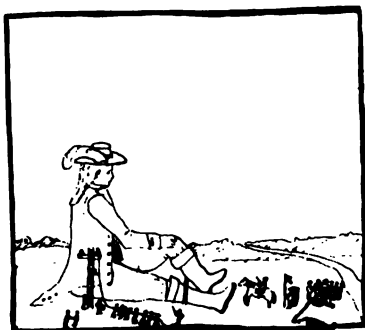
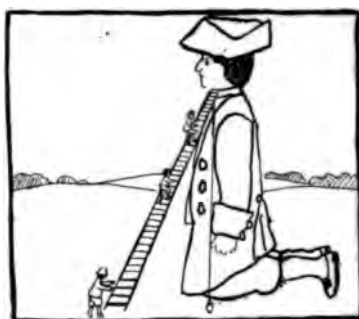
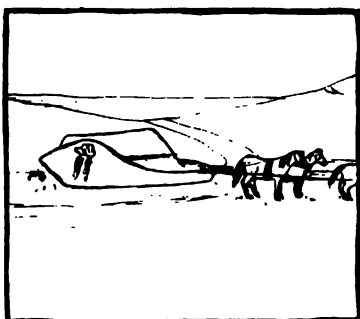
The French have a useful saying, to the effect that if every man were doing what he is fitted to do, the cows would be well tended. Not all children are fitted, in this day of universal book education, to revel in what Stevenson calls "purple passages," or to esteem "Lycidas" the most beautiful poem in literature; but no child is unfitted to love a good stirring story. Let him be artistic to his finger tips; or let him be stolid as inheritance and environment can make him, still a few deathless tales are his heritage. Who shall dare substitute a mess of pottage and condemn him to be forever an Edomite, a reader of best sellers and magazine fiction?

Good parents see to it that their children know these tales. Good teachers see to it that other people's children know some of them. Sometimes, in the Francis W. Parker School, a class tells one in the morning exercise; a group of orientals, robed in gay, rich garments, listens breathless to one of Sinbad's stirring adventures; and their eager interest at the crisis only mirrors the interest of the rest of the audience—in our seats in the hall; or the much-enduring Odysseus tells his sad tale to King Alcinous and his court; or a Virgil class represents a Punic feast, at which Aeneas pours forth his eloquent story to Queen Dido.

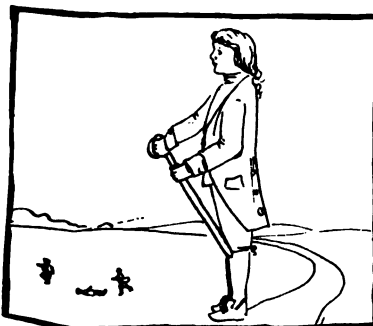
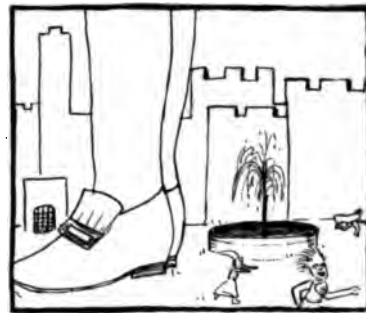
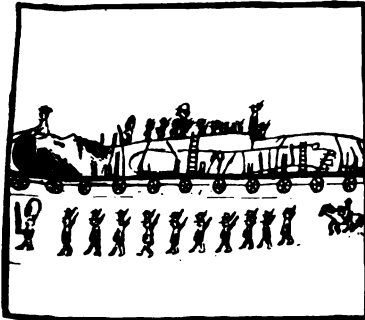
*It is a sad fact that the children quoted in the first paragraph of this article are not more ignorant of Bible literature than our average eighth-grade boy or girl. We wonder if our experience is uncommon—if other schools find that Bible stories are told in the homes. As most of our children have good homes and many attend Sunday school, it is difficult to account for the ignorance which prevails in this form of the world's great literature.

Sometimes a grade makes illustrations for a story. We have tried three ways of showing these pictures to the School—by blackboard drawings, by pen-and-ink sketches shown in the reflectoscope, and by drawings on ground glass for the stereopticon. In every case, each pupil selected some part of the story which he wished to illustrate. After making the first rough sketches, they found that they needed to have more practice in drawing people, so they spent some time sketching one another in different positions, studying carefully the position they expected to use for the morning exercises. Blackboard drawings are in some respects the most satisfactory for this purpose. These drawings may be used by natural light. The children use simple lines and draw very freely. Sometimes, after much practice, they draw while the school looks on. Every pupil in the eighth grade made a blackboard drawing for "Pilgrim's Progress." Then they told, in Bunyan's dramatic words, the wondrous adventures of Christian on his way to the Celestial City. For "Robinson Crusoe" they tried sketching on ground glass, with pen and India ink. This process proved difficult and was not very satisfactory. Other members of the school have had experience since then, and we have found that sketching on ground glass, with a soft pencil, is more effective. These sketches are used in the stereopticon. The story of Gulliver in Lilliput has been told with the aid of the reflectoscope. The drawings were made large at first, as it seemed much easier, and finally they were reduced to the required size, finished with pen and ink, and neatly mounted. At the close of the story, one of the boys pointed out the political significance of the satire. The accompanying illustrations show the character of the children's drawing.





CHILDREN'S DRAWINGS ILLUSTRATING GULLIVER'S TRAVELS



CHILDREN'S DRAWINGS ILLUSTRATING GULLIVER'S TRAVELS

POETRY EXERCISES

Poetry is an ally of the music in the light of the morning exercise. It plays its part in the introductory reading. The teacher in class will choose an appropriate piece of verse to follow. Happy is he, indeed, if he can find one that will fit the topic of the morning—Miss Mulock's "Garden" for an exercise about the school garden; "The Birds" is the subject. Most often, however, he chooses on an unrelated theme, chosen for its general beauty, its inspiring message—Stevenson's "The Road", Wordsworth's sonnet beginning "The world is too much with us", Repetition here is a virtue, for by rehearsing the verse, the school gradually comes into possession of the heritage. A seventh grade once printed a list of exercise readings which had proved to be favorable to teachers.

The present class has printed a revised list of contents runs thus:

Bible

Beatitudes, St. Matthew, Ch. V
Corinthians I, Ch. XII
Corinthians I, Ch. XIII
Psalm XXIII
Psalm XXIV
Psalm XC

From St. Francis

Canticle of the Sun

Blake, William 1757-1827

The Piper and the Child
The Shepherd

Brown, Sir Thomas 1605-1682

My Garden

Browning, Robert 1812-1889

Home Thoughts from Abroad
A Song from Pippa Passes
Epilogue to Asolando

Burns, Robert 1759-1796

- A Man's a Man for A' That
 To a Mountain Daisy
 To a Mouse
 Up in the Morning Early
Carmen, Bliss, 1861
 A Vagabond Song
Carroll, Lewis 1832-1890
 Jabberwocky
Cunningham, Allan 1784-1842
 A Sea Song
Emerson, Ralph Waldo 1803-1882
 Forbearance
 Duty
Kipling, Rudyard 1865
 From a Song of the English
 Recessional
Longfellow, Henry Wadsworth 1807-1882
 Nature, the Old Nurse
Martin, William 1834-1896
 An Apple Orchard in the Spring
Milton, John 1608-1674
 Song on May Morning
Mulock, Dinah Maria 1826-1887
 Green Things Growing
Nashe, Thomas 1567-1601
 Spring
Rands, William Brighty 1823-1882
 The Wonderful World
Riley, James Whitcomb 1853
 When the Frost is on the Punkin
Scott, Sir Walter 1771-1832
 My Native Land, from *The Lay of the Last Minstrel*
Shakespeare, William 1564-1616
 Ariel's Song, from "The Tempest"
 Puck and the Fairy, from "Midsummer Night's Dream"
 Polonius to Laertes, from "Hamlet"
 Under the Greenwood Tree, from "As You Like It"
 The Quality of Mercy, from "The Merchant of Venice"
Stevenson, Robert Louis 1850-1894
 A Camp
 The Celestial Surgeon
 The Land of Story Books
Tennyson, Alfred 1809-1892
 Flower in the Crannied Wall
 The Eagle
 From The Golden Year

Whitman, Walt 1819-1892

Captain, My Captain

From the Song of the Rolling Earth

I Hear America Singing

Wordsworth, William 1770-1850

The Daffodils

The Rainbow

The World

Yeats, William Butler 1865

The Lake Isle of Innisfree

During the year every grade is studying poetry in the class room—the first, Mother Goose, perhaps; and the twelfth, Milton. This study, like history and geography and all others, finds its forum in the morning exercises. After a class has become acquainted with several poems that they like, they generally want to present them to the school, for verse is song and must be vocalized to be completed, and people who are trained into social feeling must share what they find good. Perhaps the program is quite heterogeneous, with each child giving his favorite—"Charge of the Light Brigade," "The Daffodils," "A Sea Song," "Ariel's Song," "The Destruction of Sennecherib." Or a class in the seventh grade has been reading Scotch ballads. On one morning, the children show pictures of Scotch costumes, Scotch peels, and Scotch scenery, and describe the border life and border feuds of three centuries ago. Before this background, on the following morning, they read "Kinmont Willie," "Chevy Chase," "The Douglas Tragedy," and sing "Lord Randal" to a tune of their own making. Or the fifth grade, hearing Burns' "To a Mouse," becomes interested in the Scotch dialect and asks for more. After a month the study eventuates in their reading before the school, "To a Mouse," "To a Mountain Daisy," "Up in the Morning Early," "I Love My Jean," "A Rosebud by My Early Walk," "The Highland Lassie," "Bannocks of Barley," "Bannockburn," "Here's a Health to Them That's Awa," "Auld Lang Syne." Or a teacher of the sixth grade has called upon the poets to aid her in lifting into a clearer air the childish hunger for wandering, for adventurous travel, that she finds among her boys. The children, finding their own dumb emotions expressed, throw themselves with ardor into the rendering of another's verse. There results a morning exercise in which pupils of the grade read Gerald Gould's "Wander Thirst," "The Buccaneer," Kipling's "Explorer," Björnson's "Over the Mountain High." As a part of the same program the boys of the High School sing Schubert's "Wander—

ing" and a buccaneering song to an air composed by one of themselves, and a mother of one of the pupils sings Eleanor Smith's "Flying Kite." Or in another class there accumulates about "Paul Revere's Ride," as a nucleus, a small collection of famous rides—"Sheridan's Ride," "The Diverting History of John Gilpin," "The Ride from Ghent to Aix." The class, having enjoyed these stories, give them again at morning exercise. Perhaps on the other hand, a grade becomes interested in an author, his personality as well as his poetry—a second grade in Stevenson, a seventh in Scott, a fourth in Blake. Such an exercise is reported among "Exercises Showing Types of Preparation." As May-Day approached, a fifth grade once read a sheaf of spring poems that they themselves had made. The following one was a favorite of the class:

Spring

With May-Day comes the lovely spring,
The ground is ready for the seed,
The father-bird begins to sing;
The mother-bird her young does feed.

The robin redbreast, fat and round,
Is tapping softly on the ground,
The foolish worm the signal hears,
And from the ground he soon appears.

Leonard M.

All the exercises thus far described were planned by grades and were carefully prepared. At other times we have mornings open to the school. There is no preparation by the pupils, except such as individuals may make voluntarily after an announcement the day before that, "Tomorrow will be a 'Favorite-Poems Morning.'" The leader, however, must prepare very carefully. He ransacks his memory and written grade-reports to find what pieces of verse certain classes learned in certain years. At the morning exercise he gives the first line of a poem and says, "Who in the tenth grade can finish that?" If he has chosen wisely, and if the Muse of Memory is propitious, a pupil rises and finishes the poem, or perhaps goes on for a few lines, and then must give over and let some one else continue. Next, the teacher will perhaps start a nursery-rhyme for the first grade to finish; for it is more diverting if the exercise is a potpourri of young and old, of beauty and nonsense. Sometimes the leader will call for any poem by a certain author—Scott, Longfellow, Stevenson, Shakespeare. Or

he will ask that some one in the audience start a poem. Perhaps there will be given a sonnet of Milton, learned the week before in the high-school class; or the "Jabberwocky," brought from home reading, or some old favorite remembered from a primary grade. The idea is by any means to make the recalling and reciting of verse a pleasure.

An exercise in which poetry is given lovingly and joyfully is possible only, be it observed, when the teaching of it has been right, when children have been free to like or to dislike, when they have not been permitted to read aloud unless they have had something to express, when they have had an interested audience wanting to get something new from their reading, when a rich background of imagery and emotion has been built up, when imagination has been stimulated and then has been given liberty to grow after its own manner.



RECITALS

Artist Recitals

The program of each concert is supplied in advance to the children. In some of the more musical groups, class discussions give to the children a few fundamental ideas of form, of themes and how they are developed, of different ways of thinking and listening. In other groups, preparation may consist chiefly in playing over and over melodies which they hear, in telling stories of composers, and in presenting the "program" or explanatory notes of music, whenever such notes are supplied by the composer.

Discussions after the recital are principally for the purpose of discovering as much as possible about the effect of the music upon the children. The only dissatisfied group I ever encountered (there are, of course, wearied individuals in many groups), was a sixth grade which conscientiously discharged the onerous duty of sitting in the front row, where their least movement would disturb the artists. Hereafter musical older children will be seated in the front.

Among the older children, there are those in whom a habit of imitating grown people's discussions on the subject begins to obscure and confuse their genuine reactions to music. Distinctions have to be drawn for them between opinions about a few details of technique which they are competent to discuss and those judgments which require experience and independent musical understanding.

At these recitals, the primary grades are seated near the doors, and are obliged to keep perfectly quiet during the music, but are permitted to escape at will during the applause. Usually about half of them remain until the end of the program.

Artists are chosen largely for their sympathy with the children's needs and experiences. The question of personality is of the utmost importance. A yearly appropriation of money for these recitals testifies to our belief that hearing beautiful music is an important element in education. For two years past, subscriptions by the parents have materially increased the fund.

ARTIST RECITAL

Friday, March 14, 1913, at 11:00 o'clock

DAVID AND CLARA MANNES

VIOLIN AND PIANO

Program

Grieg	-	-	-	-	-	-	-	-	-	Sonata in F major
										Allegro con brio Allegretto quasi andantino Allegro molto vivace
Bach	-	-	-	-	-	-	-	-	-	Air on the G string
Beethoven	-	-	-	-	-	-	-	-	-	
Brahms	-	-	-	-	-	-	-	-	-	
Debussy	-	-	-	-	-	-	-	-	-	
Wagner	-	-	-	-	-	-	-	-	-	Prize song from Meistersinger
Mozart	-	-	-	-	-	-	-	-	-	Sonata in G major
										Adagio—allegro Tema con variazione

This is an ideal program. Variety is one of its obvious
istics. The two sonatas, at the best, gave great joy to the
to the unmusical they gave, at least, the suggestion of an ide
pleasure which others have and afforded some training in
The rest of the numbers are either short, simply melodious a
mical, or of the obvious "program" type. The encores were
appeals to popular taste, but were beautiful, though "ligh
We have not found it necessary to resort to "catchy" musi
be observed from the following programs:

MORNING EXERCISE IN ANTICIPATION OF CHRIST

Monday, December 2, 1912, at 11:00 o'clock

MRS. GUDRUN THORNE-THOMSEN

MISS JULIA MARY CANFIELD

Piano:—Christmas Morn, A Musical Narrative - - -

COMPOSER'S NOTES:—

The shepherds assemble, playing their different instruments in token of }
Maidens and youths gather flowers. }
The youths gather in front of the cabin while the shepherds advance, }
pipes. }
The girls kneel and lay flowers near the cradle of Jesus.

First caravan—at a great distance—drawing nearer—first caravan arrives.
 Second caravan—
 Third caravan—
 The crowd gathers from all directions.
 The three caravans unite; the Magi offer their gifts.
 The crowd departs; the caravans prepare to depart.
 Departure of the Magi Kings.

Story:—What the Bells Said

RECITAL

BY

MR. ARTHUR BURTON

Wednesday, October 25, 1911, 10:20 a. m.

Where'er You Walk	- - - - -	Händel
Faithfu' Johnie	- - - - -	Beethoven
Lord God of Abraham (Elijah)	- - - - -	Mendelssohn
Nähe des Geliebten		
Faith in Spring }	- - - - -	Schubert
Who is Sylvia? }	- - - - -	
Die beiden Grenadiere	- - - - -	Schumann
<hr/>		
The Hills o' Skye	- - - - -	Harris
An Irish Love Song	- - - - -	Lang
A Fable		
I Will Give You the Keys of Heaven }	- - - - -	Old English

A CAPELLA CHOIR

OF NORTHWESTERN UNIVERSITY

MR. P. C. LUTKIN, Conductor

Friday, May 13, 1910, at 2:25 o'clock

Program

Motettes		
Alla Trinita Beata	- - - - -	Mediaeval Hymn
Gloria Patri }	- - - - -	Palestrina
Adoramus Te }	- - - - -	
Motettes		
Creation's Hymn	- - - - -	Beethoven
God so Loved the World	- - - - -	Stainer
Christmas Carols		
Hail, all Hail the Glorious Morn }	- - - - -	Old Bohemian
The Angels and the Shepherds }	- - - - -	
Christmas Song	- - - - -	Cornelius
Solo, Miss Mary Mulfinger		
A Joyful Christmas Song	- - - - -	Gevaert
Madrigals		
Since First I Saw Your Face	- - - - -	Morley

	All Among the Barley	-	-	-	-	-	-	-	-	Sterd
	Part Song—Night Whispers	-	-	-	-	-	-	-	-	Molland
Folk Songs	Swedish Folk Song									
	Silent, O Moyle	-	-	-	-	-	-	-	-	I,
	Come, Dorothy, Come	-	-	-	-	-	-	-	-	Swob
Choral Blessing		-	-	-	-	-	-	-	-	Lut

EIGHTH ARTIST RECITAL

Monday, February 13, 1911, at 11:00 o'clock

MABEL EAMES WOODWORTH, *Violinist*HANS HESS, *'Cello*MARIE C. BERGERSEN, *Pianist*

Program

Trio op. 11	-	-	-	-	-	-	-	-	-	Beetho
	Adagio									
	Variations									
Sonata in D Minor	-	-	-	-	-	-	-	-	-	Cora
	Prelude									
	Allemande									
	Sarabande									
	Giga Allegro									
Prelude	-	-	-	-	-	-	-	-	-	Debuc
Romanze in F major	-	-	-	-	-	-	-	-	-	Beetho
Bourée	-	-	-	-	-	-	-	-	-	Weic
Trio	-	-	-	-	-	-	-	-	-	Sch
	Andante Cantabile									
	Scherzo									

Children's Recitals

These occasions provide the kind of audience that is so stimulating to effort. They satisfy childish curiosity about the attainments of others, and a craving for a gauge by which to measure their own and others' progress. Giving pleasure is the motive emphasis in preparing the programs.

The instrumental recitals given by the high-school students are often managed by the students themselves. The plan suggested for them includes the co-operation of the private teachers, and the provision of thoroughly good selections. These recitals are recognized by the children as fine opportunities of testing one's courage and ability to concentrate. Following are three typical programs:

SCHOOL RECITAL

Tuesday, February 27, 1912, at 10:20 a. m.

The "Duet" - - - - - Reinecke

Fifth and Sixth Grade Girls
Violin obbligato (Tenth-Grade Boy)

Dreamy Lake - - - - - Henry K. Hadley

Treble Clef Club

Two Sentences

- a. Words by Matthew Arnold, composer unknown
- b. Words by Longfellow, adapted from Beethoven

Parker Quartette

The Violet, canon in two voices - - - - - Reinecke

Seventh and Eighth Grade Girls

Italy - - - - - Mendelssohn

Eleventh and Twelfth Grade Girls

Look Upward, canon in two voices - - - - - Reinecke

Ninth to Twelfth Grade Girls

RECITAL

February, 1913

Violin: Mendelssohn - - - - - Concerto, first movement

Songs: Schumann - The Snowdrop, and 'Tis He, from "Songs for Children"

Piano: Beethoven - - - - - Op. 14, Sonate I., first movement

Song: Reinecke - - - - - Spring Flowers, with obbligato

Given by three members of the eleventh grade

PROGRAM OF ORIGINAL SONGS

February 4, 1910

Drawing near the Light (reading of text)

Words - - - - - William Morris

Melody - - - - - Ninth Grade Boy

Hellas

Words - - - - - Fourth Grade Child

Melody - - - - - Group of Fourth Grade Children

Chorus for Fourth-Grade Puppet Play

Words - - - - - Jennie Hall

Melody	-	-	-	-	-	-	-	-	<i>Six Fourth Grade</i>
Slumber Song of the Shepherds									
Melody	-	-	-	-	-	-	-	-	<i>Four Sixth Grade</i>
Soldier, Rest									
Words	-	-	-	-	-	-	-	-	<i>Sir Walter</i>
Melody	-	-	-	-	-	-	-	-	<i>Three Eighth Grade</i>
In Mid-Atlantic									
Words	-	-	-	-	-	-	-	-	<i>Eugenia B. A</i>
Melody	-	-	-	-	-	-	-	-	<i>Five Eighth Grade</i>
Buccaneer's Song									
Melody	-	-	-	-	-	-	-	-	<i>Two Eighth Grade</i>

Note.—Volume I of the YEAR BOOK contains an article on melody writing.





LISTS OF MORNING EXERCISES AND MARCHES

A Classified List of Typical Morning Exercises

A Suggestive List of Marches

A CLASSIFIED LIST OF TYPICAL MORNING EXERCISES

The reports of exercises, fully or partially given in the main body of this book, indicate the underlying purposes of those exercises, and their connection with the actual class-room work and other activities of the School.

It is the belief of the School that each type of exercise has a certain purpose or value, aside from the subject-matter presented.

It is hoped that the following list of exercises will fulfil a two-fold aim: first to show the broad general purposes that govern the presentation of various types of exercises by the pupils of the School; second, to indicate by means of the classification, the scope of the subject-matter presented.

The list here given contains only a comparatively small number of the many exercises that have been given during the twelve years of the School's life, and only the exercises that are typical. In each case the grade of elementary-school pupils giving the exercise is indicated by a number in parentheses. Thus (4) printed after an exercise means that it was given by fourth-grade pupils. Exercises given by high-school pupils are indicated by (H. S.).

Type I. Exercises Which Have as Their Underlying Motive the Development of the Esthetic Sense

EXERCISES ON ART

How we Planned the Christmas Play; Sketches and Color Schemes (8)
Sketching Nursery Rhymes before Audience; Titles Guessed by Audience (H. S.)

Decorating the Kindergarten Room (H. S.)

Flower Sketching and Designing (H. S.)

Block Printing and Stenciling (H. S.)

Cartoons (H. S.)

***Japanese Art (H. S.)**

***Greek Vases (4)**

***The Parthenon (H. S.)**

Pictures of Emerson, Ruskin, etc., presented to the School (4 to H. S. incl.)

Note—While most of the exercises devoted exclusively to art have been given by elementary school pupils, art has had a very prominent though incidental use in a large proportion of the exercises on other subjects given by the elementary grades.

*The starred exercises are especially good examples of this type.

EXERCISES ON LITERATURE

1. Stories—"Three Billy Goats Gruff," "The Gingerbread Man," "Blind Sambo," "The Old Woman and her Sixpence" (1)
2. *Shepherd's Poem (2)
3. Books that we have Read (4)
4. Story of Odysseus (4)
5. *Autumn Poetry (8)
6. *The Little Flowers of St. Francis (7)
7. *Stories of Siegfried, with Wagner Motif (4)
8. Norse Sagas (Stereopticon) (5)
9. The Lady of the Lake (8)
10. Poem—Hervé Riel (7)
11. Gulliver's Travels (Illustrated by drawings of pupils) (8)
12. Ancient Mariner (H. S.)
13. Milton's Poems (H. S.)
14. American Poets (Entire school)
15. Marcus Aurelius' "Meditations" (H. S.).
16. *Spontaneous Stories (Entire school)
17. *Spontaneous Poetry (Entire school)

Note—Many spontaneous exercises on the children's favorite poems have been given.

MUSIC

1. Weekly Rehearsals (5-12, incl.)
2. Weekly Rehearsals (Kindergarten to 4, incl.)
3. Extra Rehearsals for Special Exercises
4. School Musical Programs
 - *Song Recitals by Various Groups
 - Scotch Ballads (8)
 - Spring Poems
 - Folk Songs
 - *Parker Composers' Mornings (Pupils' original compositions)
 - High-School Boys
 - Fifth Grade to Twelfth-Grade Boys
 - *Violin Recital (H. S. Boy)
 - *Part-Song Recital (Older children for younger ones)
 - *Instrumental and Vocal Recitals (H. S.)
5. *Artist Recitals
 - Violin and Piano—Mr. Leopold Cramer and Mr. Ernst Consolo
 - Song Recital—Mr. Arthur Burton
 - Sonata Recital—Mr. and Mrs. David Mannes
 - A Capella Choir of Northwestern University, Mr. P. C. Lutkin, Director

DRAMA

1. Aesop's Fables (Dramatized by class) (1)
2. *The Hunchback (A Hallowe'en Play) (2 & H. S. Boy)
3. Scenes from Uncle Remus (Dramatized by class) (3)
4. *Return of Odysseus (Dramatized by class) (4)
5. La Salle (French) (5)

- *Hänsel and Gretel (German) (Folk Songs from Humperdinck's score used) (6)
- *Ivanhoe (Dramatized by class) (7)
- *Lady of the Lake (Dramatized by class) (8)
- Cricket on the Hearth (Dramatized by class) (H. S.)
- *Tom Pinch (H. S.)
- The Melting Pot (H. S.)
- *As You Like It (H. S.)
- Note—The Pottery Exercise, fully given in text, is one of the best examples of esthetic type.

Type II. Exercises That Have as Their Purpose the Awakening of a Social or Civic Consciousness

A. With Reference to the School Community

EXERCISES ON SCHOOL PROJECTS

- 1. Making Play-Houses for Hospital Children (1)
- 2. Our Hen-House (1)
- 3. Santa Claus Toy-Shop (Entire school)
- 4. The Pet Animals of the School (1-4, incl.)
- 5. Recorder, Our School Paper (H. S.)
- 6. Our "House" (8)
- 7. The Camera Club (Entire school)
- 8. The Humane Society (Entire school)
- 9. "Investigation Lane" (4)

EXERCISES FOR ENTERTAINMENT

- 1. Valentine Party (Entire school)
- 2. Skipping Party (Entire School)
- 3. Shadow Pictures (8)
- 4. Charades (H. S.)
- 5. Old-Fashioned School (5-8, H. S., Faculty)
- 6. Sleight-of-Hand Performance (8 boys)
- 7. Alice in Wonderland (H. S. girls)
- 8. Original Animal Songs for School to Guess (6)
- 9. Christmas Parties (Entire school)
- 0. Reminiscences (Alumni)

EXERCISES ON SUMMER EXPERIENCES

- 1. Spontaneous Exercises on Miscellaneous Summer Experiences (Entire school)
- 2. The Sea Shore (5-6)
- 3. Camping and Fishing (Entire school)
- 4. Camping on Lake George (Stereopticon) (Group from various grades)
- 5. Yellowstone Park (Group from various grades)
- 6. The Seattle Exposition (8th Boy)
- 7. The Grand Canyon (6-7)
- 8. The Indians of Wisconsin (H. S. Girl)
- 9. Jamestown Exposition (H. S.)
- 0. A Summer Trip to France (H. S. Girl)

EXERCISES IN THE FORM OF TOWN MEETINGS

1. The School Paper
2. Courtesy
3. Morning Exercises
4. Passing of Classes through the Halls

Note—For exercises of this type see also:
 Exercises on Special Days 2, 7, 13, 14
 Exercises on Art 1, 2, 3
 Exercises on Handwork 14, 15
 Exercises on Music 1, 4

B. *With Reference to Larger Community, City, Nation and World*

EXERCISES ON CIVICS

1. Milk—A Visit to a Model Dairy and to the City Hall; Ordinances Regarding Pure Milk (8)
2. Bonds—Excursion to Drainage Canal; How such Great Public Works are Paid for (8)
3. Taxes—What Constitutes a Good Tax? (8)
4. Drainage Canal—The Fight for Health in Chicago (8)
5. Child Labor (H. S.)
6. Preservation of Niagara Falls (H. S.)
7. Chicago's Water Supply (3)
8. Immigration (H. S.)
9. The American Fleet (H. S.)
10. School Election Day (Entire school)
11. Registration and Election (Preliminary to Mock Election by School) (Faculty)

EXERCISES ON CURRENT EVENTS

1. Spontaneous Exercise on Current Events (Entire school)
2. Events of the Day (H. S.)
3. The Chinese Revolution (H. S.)
4. Norwegian Independence (Faculty)
5. Opening of Congress (H. S.)
6. The Fifty-Ninth Congress (H. S.)
7. The President's Inaugural Address (Faculty)
8. The President's Thanksgiving Proclamation (H. S.)
9. The Progressive Platform (H. S.)
10. The English Budget (H. S.)

Note—A large number of the exercises on current events have been those ~~de-~~ with miscellaneous important events of the day.

EXERCISES BY OUTSIDE SPEAKERS

1. Stories—Mrs. Thorne-Thomsen
2. Siberia—Miss Zonia Baber
3. *Abraham Lincoln—Mr. Du Bois
4. *The Social Settlement—Miss Jane Addams
5. *The Juvenile Court—Judge Ben Lindsey
6. Astronomy (Series of Illustrated Lectures)—Dr. F. R. Moulton
7. *The Big Brother League—Mr. H. Thurston
8. Alaska—Dr. Giffin
9. Corn Products (Stereopticon)—Mr. Wagner

- 1. Animals of Lincoln Park—Mr. Cy DeVry
- 2. The Academy of Sciences—Dr. Wallace Atwood
- 3. "Chicago" (Plans for Beautifying It) (Stereopticon)—Mr. F. A. Delano
- 4. Gymnastic Dancing—Miss Russell
- 5. *"Social Service"—An Alumnus
- 6. The Fortress Cities of Argolis (Stereopticon)—Miss Florence A. Stone

EXERCISES ON SPECIAL DAYS

- 1. Opening Day
- 2. County Fair Day
- 3. *Chicago Day
- 4. Columbus Day
- 5. Thanksgiving Day
- 6. Christmas
- 7. Valentine's Day (Parties)
- 8. *Lincoln's Birthday
- 9. *Washington's Birthday
- 10. May Day
- 11. *Memorial Day
- 12. Field Day
- 13. Commencement
- 14. Special Memorial Exercises for Former Pupils and Teachers

Note—For exercises of this type, see also:
Exercises on Mathematics 1, 2.

Part III. Exercises Which Have as Their Purpose the Reviewing, Intensifying and Widening of Experiences; the Sharing of Experiences; and the Imparting of Knowledge

EXERCISES ON DOMESTIC SCIENCE

- 1. The Growing and Marketing of Tea; Most Healthful Way of Preparing It (Stereopticon) (H. S.)
- 2. The Use of Lightening Material in Cooking (H. S.)
- 3. Flour Milling
- 4. Sugar (H. S.)
- 5. Shredded Wheat (7th Boy)
- 6. An Experimental Study of Foods (2)

Note—Domestic Science has formed a part of many of the exercises on other subjects given by the elementary grades.

EXERCISES ON GEOGRAPHY

- 1. The Comparison of the Great Ice Sheet to this Winter's Snow Sheet (5)
- 2. The Great Lakes and the Ships that Sail Them (4)
- 3. The Mississippi (the Levees, Loops, and Cut-Offs in Detailed Maps) (6)
- 4. The Jetties at the Mouth of the Mississippi (7)
- 5. The North Shore of Lake Michigan (8)
- 6. The Highs and Lows of the Weather Map (6)
- 7. Forest Areas of the United States, with Detailed Map (Faculty)
- 8. River Valleys, Illustrated by Diagrams of North Shore Ravines (6)
- 9. The Indiana Sand-Dunes (Based on Excursion) (4)
- 10. The Grand Canyon (Stereopticon) (8 and H. S.)

11. Topographic Maps—Method of Plotting, Illustrated by Field Work done in Lincoln Park (8)
12. "Our Geography Books"—Post-cards, Maps, Stories, Arranged by Grade (4)
13. "Six Thousand Miles in an Auto" (Stereopticon) (Faculty)
14. The Geography of Norway (Stereopticon) (5)
15. The Philippines (Illustrated) (6)
16. The Trans-Siberian Railroad (7)

EXERCISES ON HANDWORK

1. Wool—Complete Processes of Washing, Spinning, and Weaving Holders for Cooking (2)
2. Dyeing—Results of Experiments with Vegetable Dyes (2)
3. Rugs—Rugs made by Pupils Described; Navajo and Persian Processes Described; Legends (2)
4. Looms—Made by Pupils, Described to School (5)
5. History of Pottery (3, 4, and H. S.)
6. Results of Experiments with Clay—Shrinkage, Color (4)
7. Models of Greek Vases; Casting, Applying Handles, Decorating (4)
8. Printing—A Visit to a Printing Plant; Description of Process and Machines (8)
9. History of Development of Boats, Primitive to Modern (Stereopticon) (5)
10. Aeroplanes—Experiments with Various Forms of Propellers (6 and H. S.)
11. Bridges—Stereopticon showing Bridges and Bridge-Building (5)
12. Experiments to show Effect of Truss (5)
13. Freight Trains—Description of Train Made for Kindergarten (3)
14. Doll-House—Made by Pupils for Children's Hospital (3)
15. Doll-Houses—Made and Furnished for Kindergarten by Pupils of (1, 2, 6)
16. Metal Work and Jewelry—History of; Description of Pupils' Work (H. S.)
17. Visit to Refinery and Kalo Metal-Shop (H. S.)

EXERCISES ON HISTORY

1. Fur Trading (3)
2. Indian Hunting (3)
3. Early Chicago (3)
4. The American Frontiersmen (7)
5. The Virginia Plantation as a Type (6)
6. Causes of the American Revolution (6)
7. Battles of the Revolution as Affected by Geography (6)
8. Forests and their Relation to American History (6)
9. Olympian Games (4)
10. Vikings (5)
11. Modern Greece (H. S.)
12. Magna Charta (8)

The Middle Ages (H. S.)

The Persian Wars (H. S.)

Mediterranean World, 450 B. C. (Three Exercises) (H. S.)

1. Conversation of Athenian, Persian, Phoenician and Egyptian, Each Praising his own Country
2. Athenian Shows Wonders of Athens to Phoenician, Persian and Egyptian
3. Visit to Socrates's Prison, Visitors Overhear Crito pleading with Socrates to Escape

EXERCISES ON INDUSTRIES

Soap-Making (5-7)

Hemp (6)

Lumbering (2)

Cod-Fishing (7)

Cotton—Raising, Ginning, Baling (3, 5)

Cotton Manufacture, Illustrated with Spinning-Wheel, Warping-Frames and Looms and Knitting-Frames (5)

Blast-Furnaces (6)

Threshing (2)

Flour-Milling (5)

Rug-Making, Navajo and Persian (2)

Salt-Mining (7)

Farming (1)

Fish Hatcheries (7)

Manufacture of Cement (H. S.)

Refining of Copper (H. S.)

EXERCISES ON LATIN

Roman Stories—Stories which Helped Train the Roman Boy (H. S.)

Hannibal—From Latin Reading Lessons and Roman History (H. S.)

Trojan Games (H. S.)

Caesar's Campaign, 57 B. C. (H. S.)

Caesar's Expedition into Britian (H. S.)

Cicero's First and Third Orations against Catiline (H. S.)

Description of Troy's Last Night, as given in Book II of Aeneid (H. S.)

How Latin became the Language of the World (H. S.)

EXERCISES ON MATHEMATICS

Cost of War and Peace (6)

Ancient Methods of Computation (5)

Surveying (7)

Practical Applications of Algebra and Geometry (H. S.)

Field Work in Geometry (H. S.)

History of Geometry (H. S.)

History of Arithmetic (Stereopticon) (Faculty)

Note—Arithmetic has been a prominent but incidental part of a large number of exercises given by the elementary grades.

EXERCISES ON MODERN LANGUAGES

1. Games and Song-Games for Children (1 French)
2. "Biron," "Petite Rosine" (Dramatized by 3 French)
3. Old Folk-Tale (Dramatized by 4 French)
4. In Paris (4 French)
5. Trip to Paris (5 French)
6. French Schools (8 French)
7. French History (H. S.)
8. Folk Songs and Games in German (2)
9. "Die Wichtelmänner" (Play) (5)
10. Berlin (Stereopticon) (7)
11. Letters from Pupils in Germany (H. S.)
12. The Rhine (H. S.)
13. Nürnberg (Stereopticon) (H. S.)
14. Current Topics in Germany (H. S.)

EXERCISES ON SCIENCE

1. Fur-Bearing Animals (With Exhibits) (3)
2. The Making of Crystals (Experimental) (Separate Exercises by 1, 6, H. S.)
3. How Soils are Made (Experimental) (4)
4. Clouds (Experimental) (5)
5. Astronomy (Series of Exercises) (5, 6)
6. The School Vegetable-Garden (7)
7. Artesian Wells (8)
8. Coal and Oil (Separate Exercises by 2, 8)
9. The Testing of Common Minerals (Experimental) (H. S.)
10. Wireless Telegraphy (H. S.)
11. Physics of Mechanical Toys (Experimental) (H. S.)
12. Magnetism (Experimental) (H. S.)
13. Manufacture of Illuminating Gas (Experimental) (H. S.)
14. Chemistry of Air (Experimental) (H. S.)
15. Spontaneous Exercises on Science Observations (Entire School)
16. Hygiene: Talk on Digestion (Faculty)

EXERCISES ON EXCURSIONS

1. Trip to Ravinia to Study Flowers, Birds, etc. (4)
2. Trip to Yerkes Observatory (Stereopticon) (5)
3. Trip to Field Museum (1)
4. Trip to Art Institute to Study Greek Sculpture (4)
5. Trip to Pushman's Rug Store (6)
6. Trip to the Chicago River (3)
7. Trip to the Sand-Dunes (4)
8. Trip to Whiting—Oil (H. S.)
9. Trip to a Farm (2)
10. Trip to Northwestern Terra-Cotta Works (5)
11. Trip to a Steel Mill (6)

o a Book Bindery (7)

o Stony Island Quarry (8)

ee also Exercises on Summer Experiences.

PHYSICAL TRAINING

Grade Singing Games (1)

Dances (German, Swedish, Norwegian, Bohemian) (1-8, incl.)

al Dances (5)

r-Ball Exercises—Bouncing and Tossing (H. S. Girls)

winging (H. S. Girls)

enics—Dumbbell (5, 6 Boys)

enics—Saber Drill (H. S. Boys)

astics—Horse, Buck (H. S. Boys)

astics—Parallel Bars (H. S. Boys)

astics—Floor Work and Mats (H. S. Boys)

for exercises of this type, see also:

Exercises by Outside Speakers 2, 6, 8, 9, 10, 12, 14.



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Chicago

FRANCIS W. PARKER SCHOOL YEAR BOOK

EXPRESSION AS A MEANS
OF TRAINING MOTIVE



VOLUME III

JUNE, 1914

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PRICE, THIRTY-FIVE CENTS

PREFACE

The present volume of the YEAR BOOK is issued as a part of a series upon the training of *motive*, which we hold as a chief aim of education. Examples of various types of children's *expression* have been selected for publication. The limits of the book have restricted the use of material to forms of expression which lead directly to the development of taste, i. e., to the more esthetic forms of expression. We contemplate presenting next year the results of school practice in placing stress upon the importance of the *impression* phase of the "organic circuit," by setting forth the belief which exists in the school that strong mental imagery and vigorous, self-actuated observation and experiment depend, not only upon *expression*, but also upon wide and varied sense *impression*, upon the child's early and continued contact with actual materials.

Through the introductory article to this volume of the YEAR BOOK we hope to give a broader point of view concerning the value of expression in the development of motive than has been illustrated by the concrete examples in the book, hoping thereby to stimulate our readers to a closer study of what has been a chief source of our inspiration for this book and for our teaching,—Colonel Parker's chapters on "Expression" in his *Talks on Pedagogics*.

CONTENTS

	PAGE
INTRODUCTION	9
HELEN GOODRICH	
POSTURE, VOICE, AND SPEECH	
Play as Fundamental in Education.....	25
FRANCES MUSSELMAN	
Oral Reading	37
NINA LEUBRIE	
The Value, Place, and Use of the Dramatic Instinct in the Education of Young People.....	50
JOHN MERRILL	
WRITING	
A Teachers' Meeting.....	122
IRENE I. CLEAVES	
MODELING	
Clay Modeling	136
HELEN PUTNAM	
WORKING	
Metal Working	148
GRACE K. DEWEY	
Making a Rug.....	153
BERTHA N. ENOCH	
DRAWING AND PAINTING	
The Social Application of Painting and Drawing.....	166
KATHERINE CLEMENTS	

ARTICLES DEALING WITH EXPRESSION IN PREVIOUS YEAR BOOKS

GESTURE, VOICE, AND SPEECH	VOL.	PAGE
The Making of a Play in a Primary Grade.....	II	28
The Nativity Story, First Grade.....	II	144
Three Thanksgiving Days—Greek, Hebrew, and American	II	153
The Function of Dramatic Expression in Education	I	54
Faculty Discussion of School Plays.....	I	74
DRAWING AND PAINTING		
Story Telling Exercises	II	172
The Setting and Costuming of a Play.....	I	67
MAKING		
Playhouses and Primitive Homes, First Grade....	II	67
A Study of Bridges, Fifth Grade.....	II	80
Investigation Lane	I	33
The School Print Shop	I	97
Printing in Seventh Grade.....	I	104
Eighth Grade Community Work.....	I	126
WRITING		
Preparation of an Exercise on the Age of Elizabeth, Eighth Grade	II	49
MUSIC		
Music in the School Community	I	77
Original Composition	I	86
Work with Children Backward in Music.....	I	93

NAMES OF TEACHERS, 1913-1914

Every teacher shared in the planning and the discussion of this
YEAR BOOK.

FLORA J. COOKE, Principal

JAMES F. MILLIS, Associate in Administration

MARY H. TOPPING	}	Kindergarten
JANE LARRABEE		
GRACE KEE		
HATTIE A. WALKER		First Grade
BERTHA N. ENOCH		Second Grade
JOSEPHINE F. LEACH		Third Grade
PEARL BACKUS CARLEY		Fourth Grade
HERMAN T. LUKENS		Fifth Grade
NINA LEUBRIE		Sixth Grade
ELSA MILLER		Seventh Grade
IRENE I. CLEAVES		Eighth Grade
LURA M. THOMAS		Ninth Grade
Latin and History		
PERRY D. SMITH		Tenth Grade
Mathematics		
ARTHUR DETMERS		Eleventh Grade
English and History		
NEALE S. CARLEY		Twelfth Grade
Latin and Mathematics		
JOHN MERRILL		Dramatic Expression
JENNIE HALL		English
ARTHUR G. MERRILL	}	German
THEA J. SCHERZ		
ALICE BRUGNOT	}	French
JESSIE FOSTER BARNES		
ANTOINETTE AILLAUD		
JAMES F. MILLIS		Mathematics
RAYMOND W. OSBORNE		Physics and Chemistry
HENRY T. MORTENSEN		Natural Science and Geography
CARLOTTA ALEXANDER		History and Geography
GRACE H. WEBSTER		Domestic Science
HELEN GOODRICH	}	Music
CHARLES M. KINNEY		
LUELLA CORNISH	}	Physical Training
FRANCES MUSSELMAN		
JOSEPH S. WRIGHT		
ELIZABETH MOOS	}	Art
KATHERINE CLEMENTS		
CHARLOTTE FOSS		
LEONARD W. WAHLSTROM		Manual Training
GRACE K. DEWEY		Metal
HELEN PUTNAM		Clay Modeling
MARY B. BRADLEY		Special Teacher

Man's thinking is organically connected with his conduct.

Knowledge about life is one thing; effective occupation of a place in life, with its dynamic currents passing through your being, is another.

James: "Varieties of Religious Experience."

The objects of Fine Arts, and all objects called aesthetic are such as may be enjoyed by a great number; some, indeed, are open to the whole human race; . . . they draw men together in mutual sympathy and are thus eminently social and humanizing.

Bain.

The loss of these tastes (i. e. for pictures, music and poetry) is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature.

Darwin 21.

INTRODUCTION

Colonel Francis W. Parker's theory of expression, as he states it in "Talks on Pedagogics," as he taught it, and much more, demonstrated it, in the Chicago Normal School, has been the working basis for the development of the social ideal in the Francis W. Parker School.

Purpose of this Year Book.—It is the intention of the faculty to describe in the present Year Book representative examples of work in expression as it has developed during the last thirteen years under the influence of this theory. The teachers realize that it can probably be made thoroughly intelligible only to those who have seen it worked out, in this school or elsewhere, to a reasonable degree of effectiveness, but the attempt will be made to present, as clearly as may be, certain characteristic examples of methods and results. The point of view throughout is that of the person who believes our human relationships to be of such vital importance that all measures for the education of children are to be judged by their results in conduct.

The Conditions Necessary for Expression.—There has been opportunity to test the theory by more or less consistent practice under favorable conditions in this school. It is a small, independent school, in which a fair proportion of the students begin in the lower grades and remain with us a number of years. Most of the classes are small, twenty being considered a satisfactory maximum for a grade. Many of the groupings result in much smaller classes, a few in larger ones. Intimate acquaintance with every child is essential to our scheme. The atmosphere of the school has always been one of great freedom and good spirits for both teachers and pupils, with the smallest element of arbitrary rule and the greatest possible stress upon motive. A certain flexibility in the program, secured through skilful arrangement of periods, and through the co-operation of the faculty with special teachers, has provided for expression in every form, and has made it an organic part of the whole growth process. The grade teachers have contributed much towards this end, both through their own skill and through their understanding of the special teacher's functions and problems.

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Bain.

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Darwin.

service to others in some form. The children are energetic, happy, often strenuous. They thrive in an atmosphere of spiritual democracy whose laws Colonel Parker formulated for them many years ago in the motto, "Everything to help, and nothing to hinder," and in the great word, "Responsibility."

The Source of our Pedagogical Creed.—Colonel Parker could never separate the power of the children's minds to develop logical habit, from spiritual and moral growth—their power to proceed logically plus the power to act wisely and effectively in every-day relations. A greater optimist never lived. There was for him "But one grasp of happiness—from that uttermost pinnacle of wisdom, whence we see that this world is well designed." He saw every child as a child of God, in his everlasting relations to a glorious past and a still more glorious future. He was an idealist—one whose perception of the ideal conditions for the children was always a challenge to a most doggedly practical side of his mind. His vision of the "higher salvation" of teacher and child together, both developing under conditions based upon his powerful application of motive as the fundamental principle of growth, is the source of stimulation and encouragement to great numbers of teachers all over this country.

Colonel Parker's chapter on "Modes of Expression" was a talk to teachers on certain possibilities of children not commonly recognized at the time, and not yet commonly credited. A careful study of the whole series of talks is necessary for a full understanding of his theory of expression, found in Chapter X, "Talks on Pedagogics." The following is offered as a first attempt to state and explain briefly the basis of our work, as outlined in this chapter. Colonel Parker's own words have been freely appropriated; whole paragraphs have been inserted wherever their brevity aids the purpose of clearness and condensation.

Motive Defined.—Colonel Parker never uses *motive* in the sense of *end*, *need* or *use* in the ordinary meaning, but always in the broader and deeper sense, implying the outlook toward the ideal and the personal energy in action. The ethical or religious sentiment, in its different phases or stages of development, is nearly always present in his use of the word. These stages are all one to him; if the tendency is toward the realization of the best motives, any sort of crude result or even apparent failure is seen as progress.

Motive.—"Attention and expression are organically related by motive. Motive is the impelling power of all human action; the higher

the motive, the higher the action. Expression is fundamentally a means of developing this impelling power to action." Motive is the one point of attack in the education of the human being; we grow only as we correspond to the highest aim we can conceive of at any given moment. "Our failures to correspond mean negation of action and disintegration of thought processes." Growth, advance, development, means that the individual is moving towards his personal ideal; growth proceeds in no other way. If we fail to act in accordance with this ideal, if we accept our second best, we do not grow. It is only by the use of the vantage ground already gained, that we can move higher. "The motive of all action is, at its origin, the instinct of self-preservation; it culminates as self-abnegation."

The social, unselfish motive opens up the vision of what we must know in order that we may work more effectively towards its realization; the more effectively we act, the better we know how to do so, the stronger the will to do so becomes, the surer we are of the ideal toward which we move. The greater the motive, the better the action; the better the action, the greater the motive; and so we move on toward the "higher salvation," in which the will for good is being perfected. The fundamental thing pedagogically must be the fundamental thing spiritually. There are always a few rules for the whole school, very few indeed, which are carefully explained, but must be obeyed, whether their importance is understood or not;* and there are always a few children in whom sheer obedience is the next step in development. But the constructive way is the stronger. We accept the child's present best motives, show him aspects of them upon which he can act

*IDEALS OF CONDUCT, RULES, AND REGULATIONS

FRANCIS W. PARKER SCHOOL—1913-1914

Just as in the world the people of a city or nation must have ideals and laws to regulate the actions of individuals and groups of individuals for purposes of public welfare, so in the school certain ideals and special regulations are necessary for the growth, rights, safety, and comfort of the pupils.

IDEALS OF CONDUCT

The principle of courtesy, of "Everything to help and nothing to hinder," governs all the conduct of the school.

1. In morning exercises, this means respectful attention, active participation in the exercises, and refraining from all disturbing acts, such as communicating with a neighbor and studying while the program is in progress. And it means, also, no talking above a whisper before the opening song or during such intervals as between the acts of a play.

2. In passing to and from morning exercises, this principle means that the pupils march in orderly double file, and that any necessary communications be not above a whisper.

3. As regards quiet in the halls, it means that pupils during school hours pass quietly and courteously, without crowding, hurrying, scuffling the feet, or speaking above an undertone.

RULES OF CONDUCT

Play Periods: Every pupil must spend the entire play period out of doors, unless

successfully. That gives him a sense of power. We keep on forever insisting upon his growing vision of his own strength, helping him constantly to act upon the impulses of his stronger, instead of his weaker self, and planning all sorts of interesting social enterprises in which he may express himself effectively. If we could be wise enough to understand each child, and could do all this without creating self-righteousness in him, it seems as if we might develop the social self to almost any degree.

Every act of expression must be preceded by certain definite conscious activities determined by *motive*. In the training of skill in expression, we train motive, the essential quality of our personality. The kind of needs we feel, the kind of thing that appeals to us as useful in the widest sense, the reasons for our actions, the ends we seek, make up the peculiar quality of our individualities. Training motive means arranging conditions and providing abundant opportunities for the child to learn his own power of right action, and to get the feeling of the advantages of co-operation, so that he may grow in the habit of acting from his best motives, his most useful and effective ones—namely, the social ones.† These give him the perspective of himself in his relation to others. He finds himself more completely in the role of “assisting audience,” learning to do many things

excused by Miss Musselman or Mr. Wright. All pupils are responsible to their regular playground directors during play periods.

Fire Drills: *There must be absolute self-control—no talking—during fire drills.*

Study Periods: The study period should develop habits of concentration upon the work in hand, hence *there must be no talking or interruption of any sort, except by permission of the teacher in charge.*

SPECIAL PERMIT REGULATIONS

1. No pupil shall leave the study room for work or play appointments without permission of the teacher in charge.

2. No pupil shall remain for work after school without the supervision of a teacher unless he has a written permit.

3. After dismissal from the grade room at the close of the day's session, *no pupil may return to the second or third floors* without permission from the officer of the day or from the officer in case the officer of the day cannot be found.

(For officer of the day see small bulletin on east wall in lower hall.)

4. All pupils who stay for outdoor play, or who have written permits to stay for work, *must leave the school premises by five o'clock.* A warning bell will be rung at ten minutes to five, at which time every pupil shall stop work or play, in the building or on the grounds, and make preparation for leaving. There are a few permanent exceptions to this regulation. These names are on file in the office.

Pupils may place books and materials in the first grade dressing room during afternoon play.

5. On Saturdays a group of pupils, including the *Weekly* staff and the boys working for the school, have permanent permits. Pupils who wish to work in the shops or with special teachers on Saturdays must provide themselves with permits signed by these teachers. Other pupils who find it necessary to come to the school on Saturdays are welcome, but they must report at the office when they come and when they go, leaving definite word where they will be in the building.

6. Every pupil must eat his luncheon in the lunchroom, unless he has on file in the principal's office a written request from his parents for other arrangements.

†“We do right by habitually imitating a larger self, whose injunctions run counter to the tendencies of our partial selves.”—J. M. Baldwin.

through understanding sympathetically, as well as critically, the effort of others.

Expression.—Colonel Parker limits the term *expression* to “the manifestation through the body of thought and emotion.” The unified movement of body and mind in the communication of meanings trains the body as an instrument of attention and expression, under the influence of motive.

“Expression is essentially *doing*. It is that toward which all human action moves, and indeed should move. Expression is ethical action; it should be the application of truth. Expression concentrates and focuses the soul; it reveals personality. The motive that controls attention and reflection is the motive to make others feel, think, and act in accordance with personal ideals. The motive of expression impels the soul to its best effort in observation, study, and reasoning.”

Classification of Modes of Expression.—The modes of expression are classified as Gesture, Voice, Speech, Music, Making, Modeling, Painting, Drawing and Writing.

Function of Modes.—The specific function of the modes of expression is the training of motive; just as the specific function of the modes of attention is the training of logical habits of thinking in as many directions as possible, and that of the central subjects, bringing the child into a knowledge of the facts of history and science. This distinction with reference to function of these three aspects of educative activity must not be understood as implying more than emphasis upon the characteristic advantage of each. In field work and experiments, in listening to others during a recitation, or in silent reading and study, the feeling of value to the child results chiefly from the successful accomplishment of a definite piece of thinking, or the acquisition of facts more or less interesting in themselves. The prime object from the teacher’s point of view is the exercise of activity in which the mind is trained to be a good tool. But, of course, there are no lessons in which consideration for others is not called for. “*Every moment of life is an ethical moment;*” every excursion and experiment and recitation brings the need of training motive. But the exercise of skill in expression is essentially, first and last, training of motive. Expression does undoubtedly train thorough habits of thinking, and its subject-matter, wisely chosen, is valuable, looking toward the education of the higher sentiments. But its peculiar advantage is that it implies constant necessity for action under a motive of the social

type. Reading aloud, singing, acting, are for an audience, not for oneself.* The joy of a skilful performance lies primarily in the fact that one conveys to others his understanding and feeling of a beautiful poem or song or an interesting character in a play. One naturally makes useful things for one's friends, paints, draws, and models to communicate feelings to others and to satisfy the conscious or unconscious need of a public to judge of his production, so that he may estimate his value among his fellows.† One writes normally, in order to send one's thoughts to another. Each of these modes of expression affords constant opportunity for showing the children that matter is more than manner and spirit more than form, and that all good manner and all good form are to be valued for the sake of gaining in ability to give to others finer matter and spirit.

Skill Defined.—Colonel Parker states the educational values of the skill-gaining process in a paragraph which seems to need further explanation. It may be well to state that he uses the term *skill* in a relative sense; he does not consider skill from the point of view of certain conventionally regulated results. Skill, in children, means growing effort and ability to express the content of the mind truthfully. The skill of each individual is simply a question of his own progress towards more and more nearly adequate expression, determined by his individual imagery, judgment, feeling. Results are not esteemed according to any set standard. Power enough to convey an idea vividly, arouse esthetic pleasure, or secure dramatic illusion is uncommon. It is evoked only by comparatively rare combinations of circumstances.

Motive Developed in the Skill-Gaining Process.—"Growth of skill in expression has a developing influence upon motive." In the modes of attention and in the study of the central subjects, motive may be developed; but in community life, with all that it implies ideally, and even with all its failures in actual practice, growth of skill inevitably is bound up with the social motive. The social ideal of conduct presents itself to different people in many different ways. It may begin as a mere trading of favors; it may be interpreted as co-operation instead of competition, ethical consideration of one's behavior, doing unto others as one would be done by, loving one's neigh-

*"To call into life the energy of a sentiment which is not destined to manifest itself by any deed, how can that be otherwise than baneful?"—*Tolstoi*.

†Judicious praise or criticism in the privacy of the grade or department room is safe, and the give-and-take among the children themselves is often very useful. Applause in the assembly room is rarely permitted.

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The Body in Expression.—"The body also is trained in all the modes, through the effort of the will to make skill in expression adequate to the thought; it depends mainly upon the variety, kind, and quality of acts of expression for its health, growth, development, and elaboration, as an instrument of attention and expression."

Expression, Attention, Action.—Expression implies attention. The consummation of attention is action. Thinking is not for itself alone but for the action which results from thinking. Even the most purely metaphysical thinking, the most abstract reasoning processes, may be said to have reference to human action. "Thought which does not end in action dies, or stagnates."

We all know the kind of person who suffers from habitual self-expression. Many people talk or write to find out what they "really think." I am sure that in the history of our school are hundreds of examples of children whose first triumphs over personal limitations in expression have been won in the effort to make a morning exercise interesting, or to communicate thought or feeling in some form to a class.* This effort means holding in the mind the content to be expressed; thinking it more clearly by the effort of the will in the anticipation of communicating it to others; getting it said or painted or sung, or written in some form; criticizing and amending both form and content, and finding both cleared and vivified in the mind as soon as it has been said or sung or painted or written. The social motive is at the bottom of the freedom and power gained in this way. If, during the preparation of that act of expression, emphasis should be put, not upon its value to others, but upon the egotistical motive, the child's thinking and expression would be hampered by the intervention of the idea of himself, or of other unimportant elements in the situation. The center of consciousness would be occupied at least a part of the time, by his feelings of personal vanity, by the craving for personal success.

Many examples might be cited of children whose natural impulses to action had been inhibited in a thousand petty ways before they came to the school, whose power to do the simplest necessary thing was crippled from lack of practice, and who had never felt the pleasurable glow which comes from being of use to others. To teach a child, clay-modeling, or gymnastic work, or moving freely about

*An idea of the number and variety of opportunities given to children to express themselves to an audience may be had from the Second Year Book.

the stage in a play, presents almost insurmountable difficulties. Place this child in a group of children who are constantly acting upon their own thought, give him something to do which he can do effectively as his share of a social enterprise, and sooner or later he will develop initiative and skill. He will lose his timidity and feeling of impotence, and gain power to think more vigorously, to help organize work and play and to become a useful member of the community. The exceptions are too rare to need mention.

MODES OF EXPRESSION

Gesture.—Gesture is the primitive mode of expression. It includes all of the changes in the body manifesting thought and feeling excepting the specialized changes characteristic of the other eight modes. The hand writes and paints and draws and models, but it is also expressive in itself. Gesture of the whole body in dramatic work is seen in its perfectly spontaneous form in the vividly imaged Mother Goose dramatizations of the first grade. Complete spontaneity of gesture has been shown also in little plays written and acted by the children under the stimulus which came as a result of a course of interesting work in history, art and literature; in English, French, or German. Pantomime, in which the child cannot rely upon speech to help him define the character he impersonates to the audience, requires great intensification and clearness of gesture. A phase of gesture appears in the spontaneous games of the younger children, another in organized games and folk-dancing. Dancing is the gesture of music. The articles on the dramatic instinct and on physical development deal with phases of gesture.

Voice and Speech.—Voice, both in talking and singing, has great significance for teachers. It is the medium through which different shades of meaning are communicated by singing, oral reading, and dramatic work. Quality and habits of voice are often important items in understanding a child. A pure quality of tone in immature voices, both in speech and singing, is nearly always "light," both as to color and volume. There is very little variety possible, either in tone-color or dynamics. It follows, of course, that much warmth of emotional expressiveness or satisfying volume, such as we look for in the mature voice, is very rare. Whatever variety exists must be gained by the child in a perfectly spontaneous way, not through imitation, but through imagery aroused by words or music. Voice must express the child's real thought and feeling.

Speech as a mode of expression is represented in six different kinds of work in the school: plays, oral reading, singing, extemporaneous speaking, dialogue, and the languages.

The bearings of speech and voice in dramatic expression are discussed in the article on dramatic expression in this volume. Oral reading also implies much training in voice and in speech habits. These habits are not acquired as isolated problems in speech-forms, but are gained under the stimulus of the desire to express thought and feeling. In singing, advance in clearness and beauty of speech is slower than in talking and reading. It is complicated by the demands of the singing tone. Impure vowel sounds in singing are easily observed and analyzed by children, being more sustained and consequently more prominent in singing than in the speaking voice. Clear consonants also are easily seen to be important in singing. Without them, singing effects are reduced to mere emotional sounds, conveying no clear thought. Dialogue and speaking to a large audience obviously require good speech, since one must not only be heard, but heard easily and with pleasure. A correct accent in a foreign language necessitates a degree of training both of ear and speech organs which must react favorably upon the ability to discriminate between good and poor speech in English, when it is a matter of real interest to the children. A variety of vowel colors, consonant sounds, inflections, and quantities are acquired in French, German, and Latin. Whenever this training comes as a result of a real impulse to convey thought or feeling, the work classifies under voice as a mode of expression. The little children often express the simplest sorts of ideas in French or German, and the advanced pupils sometimes use the language as a means of self-expression.

Music.—"The educational function of musical expression is to cultivate and enhance those emotions which influence in the highest degree the motives of man." Colonel Parker spoke over and over again of the cultivation of the spirit, the higher development of the soul, through music. He saw in chorus-singing the best opportunity in the school for the expression of our common ethical and religious aspirations, and he believed in serious singing in morning exercises and on all important occasions. "Whatever is best for the soul is ever and ever best for the body. Music is an aid to development through the effect of rhythm upon both body and mind."

Many children have anticipatory emotional experiences of great

ideas—of God, of the universe, of brotherhood, which they cannot as yet express in words of their own. In the "Varieties of Religious Experience" James speaks of these intuitions in connection with the "strangely moving power of passages in certain poems when we were young—irrational doorways as they were, through which the mystery of fact, the wildness and pang of life stole into our hearts and thrilled them"..... "We are alive or dead to the eternal inner message of the arts, according as we have kept or lost this mystical susceptibility." The recreative arts* waken and vivify this susceptibility; they present perfect models for the children to interpret according to the power of imagination and the emotional response of the individual. The creative arts† originate in the impulse to embody imagination and feelings which have taken new forms in the individual mind. And it is this susceptibility which we may hope to stir, if we choose poetry and music and plays for the children with enough care and insight, and keep them free from the self-consciousness which hinders expression.

Making.—Making has a very important function in the development of bodily co-ordinations. A sharp difference emphasizes the functions of music and making; for the motive of music is the exaltation of the spirit, while the motive of making is to supply the material basis for life, the means by which spirit makes itself manifest in creation. In making, the complete externalization of the individual concept is effected. Making, therefore, differs from modeling, painting, and drawing, in which certain aspects only of the concept are expressed, each through its appropriate material. The motive of making is the practical use of the object made, an easily appreciated motive and peculiarly adapted to primitive states of development, though not confined to them. The motive is, so to speak, a tangible one. Concentration is comparatively easy; for the carefully drawn plan is there to be consulted, parts are soon made and are there to be handled and looked at as much as is necessary, so that any vagueness in the concept may be cleared up quickly and perfectly. Step by step the parts must prove their adequacy to the purpose of the plan. Persistence is obviously necessary; the use of the product is there before the mind, requiring that the product shall be an adequate one. The body is trained under this urgency of the will in its demand for a de-

*Drama, oral reading, music.

†Modeling, painting, and drawing, imaginative writing, making tunes.

quacy: and there are the parts, there is the whole product, finally, standing for criticism.

Manual training offers the greatest range of choice in making. From the tiny fence pickets, sawed out and used by the youngest children in the kindergarten for protecting their flowers, to the fine music cabinet, with insets of tiles, made by seniors; from the third grade desk sets to the cabinet work in the eighth grade room; from the dolls' beds made in the "factory method," to the wonderful original bridges; from crude spears and shields for a play to a carefully constructed nine-foot boat; woodwork presents endless opportunities for developing skill in expression under genuine motives. The articles on rug-making and metal-working in this book illustrate a type of making in which the esthetic element is a prominent feature.

The Art Modes.—Colonel Parker's conviction that the art modes (by which he meant modeling, painting, and drawing), must become one of the most important phases of educative activity in the curriculum, is stated below in his own words. The quotations are grouped to suggest his development of motive and of the psycho-physical process in the province of the art modes.

1. Motive.—"Making is related to the art modes because individual concepts in each of these modes constitute the bases of the expressive acts. In making, the concept is completely realized in an external object. By the other conceptive modes, modeling, painting and drawing, the concepts are partly realized. In modeling, the concept is expressed in outward form of three dimensions; in painting, by colors; in drawing, by lines and shading. Making has for its motive practical use. The design of art is limited to the expression of thought; the individual concept is a mental means or medium of thought expression; motive and thought are embodied in an individual concept." "Mere expression of the concept in itself has little to do with art; it is the character, the life, the power expressed by means of this thought-embodiment that is the all-controlling motive." "Mere imitation of art has no relation to art itself, and no educative influence. Imitation, whatever its kind or quality, is essentially making, minus the best thing in making—motive." . . . "In manual training, the one motive of making is the function of the thing made; in art the one motive is to give to others a great controlling thought,—to embody this thought in an individual concept, and to externalize that concept by skill." "Art shows to man things which he can-

ideas—of God, of the universe, of brotherhood, which they cannot as yet express in words of their own. In the "Varieties of Religious Experience" James speaks of these intuitions in connection with the "strangely moving power of passages in certain poems when we were young—irrational doorways as they were, through which the mystery of fact, the wildness and pang of life stole into our hearts and thrilled them". "We are alive or dead to the eternal inner message of the arts, according as we have kept or lost this mystical susceptibility." The recreative arts* waken and vivify this susceptibility; they present perfect models for the children to interpret according to the power of imagination and the emotional response of the individual. The creative arts† originate in the impulse to embody imagination and feelings which have taken new forms in the individual mind. And it is this susceptibility which we may hope to stir, if we choose poetry and music and plays for the children with enough care and insight, and keep them free from the self-consciousness which hinders expression.

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brought out; the emotional warmth conveys ideas through the voice. Writing must be steady, controlled, and cannot depend upon the personal magnetism of the speaker for its effectiveness.

The teachers have worked out Colonel Parker's theory of writing as a mode of expression to the point where a great deal of the children's writing has a genuine motive. The difference is world-wide between written English developed on the basis of a demand for thought-communication (a real demand in the child's mind) and composition for the sake of training the children to avoid mistakes in form. The teachers believe that discrimination in the choice of words, as to their exact meanings and beauty of sound, can be developed through written English, which is a natural outcome of self-motivated work of many kinds. A complete list of school work requiring expression in this mode would be a large one. The "Recorder" and the "Parker Weekly" are always with us, needing stories, poetry, reports, editorials, jokes. Writing plays necessitates vivid imagery under the special demands of dramatic coherence. Writing lesson-material, fables, and texts for songs for a younger grade, or for a future class of the same grade, enlists very good thinking. Making geography, science, history, civics, and domestic arts books gives a dignified reason for good writing. Speeches and poems for May Day pageants, Thanksgiving exercises, prologues of plays, require the best possible effort. Reports of addresses heard, or of discussions of important grade affairs, or of Morning Exercises, serve useful purposes, especially as subjects of letters to absent pupils. Many letters are exchanged between older children and the primary grades, and between teachers and pupils during vacation, or for some special reason during school time. Non-sense poems, songs, and speeches for parties and "larks" tax the ingenuity to make a perfectly free kind of fun go with good feeling and good taste.

The faculty offer their testimony to a moving idea and habit of mind, acquired in working under the ideals of Colonel Parker as we understand them. Quoting one of the faculty, "To be sure enough of a thing so that one dares to teach it to a child means a great deal." But it is one of our strongest beliefs that we may confidently venture to teach a child to express himself in a great variety of ways. This can be safely accomplished only under conditions which insure against self-consciousness and over-stimulation, the chief condition being an atmosphere in which ideals of usefulness to others are taken for

granted. Assurance of reality in our efforts comes to us in various ways, particularly in daily instances of a generous attitude of mind, self-control, and high standards of work, brought about in the children under the ideals of service and of responsibility. Little enough, at best, can be known of the inner life of a child; nothing deeply useful can be known unless his motive is respected and given endless opportunity for expression, under influences which tend to illuminate the vision of his fellowship with man and his kinship with God.



PLAY AS FUNDAMENTAL IN EDUCATION

Perhaps one of the most interesting and significant movements of our day is the reawakened interest in play as a factor in education. Municipalities have come to believe that it is unwise and exceedingly dangerous to allow young people to seek recreation in dance halls, pool rooms, and saloons, and to force them to depend upon commercialized amusement as their only means of enjoyment. We have been forced to provide play facilities for children and youths, not wholly because we have recognized the physical demand for a legitimate means of extending the abounding energy of adolescence, but because of the unmistakably close relation between repression of this force and youthful criminality and vice. We have begun to count the cost of playgrounds and parks as gain in morality and good citizenship. Centuries ago Plato said: "If children are trained to submit to law in their plays, the love of law enters their souls, never leaves them, and helps to develop them. . . . Education should begin with the right direction of children's sports." The Greeks believed that "man is whole and entire only when he plays." By means of games, sports, swimming, dancing, etc., the Athenian and Spartan youth were brought to a degree of patriotic fervor and physical strength, beauty, and grace which have since been scarcely approached.

At a much later period Richter, of Germany, said: "The plays of children are as serious and full of meaning to themselves and in reference to their future as ours are to us." Froebel wrote: "Play is the freest, most spiritual activity of man at this stage (childhood), and at the same time is typical of human life as a whole. It holds the source of all that is good. The plays of children are germinal leaves of all later life. Play is not trivial. It is highly serious and of deep significance." To Froebel belongs the distinction of having found the real place of properly directed play in education, and of so coordinating play and work that the joy, freedom, and spontaneity of the one might be carried over into the other.

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or neglected, and the stability of culture rests upon the same condition. To try to educate the mind apart from the body is an approach to the dark ages and asceticism where this basis was lost. Indeed, the best test of the value of body-training is its effect upon the higher culture for which it opens new possibilities."

Biologists tell us that each human life goes through in its development the whole story of the development of the race. We are told that we owe our present physical form to certain great fundamental physical activities which were necessary during the long ages of evolution from the lower to the higher or human type, to provide food and shelter, to escape from or to pursue enemies, and that these oft-repeated, racially old activities have left their "never-to-be-forgotten mark in the very organization of our brain and muscle fiber." These ancestral work movements are the play movements of children. They constitute the mass of "inner impulses" or hereditary instincts for which we must provide expression and upon which true education must build. Given a suitable environment and the opportunity for play, the very young child will, through his instincts of observation and imitation, educate himself up to a certain point. For example, the little girl in her doll play imitates the manners, expressions, customs, sometimes even the tone of the voice, of her own mother. The doll is bathed, dressed, fed, read to, taken out walking or riding, put to bed, scolded, punished, in all ways receives the treatment to which the child herself is accustomed or which she has observed in others. She plays house, sweeps, scrubs, washes dishes, washes and irons her doll's clothes, bakes bread and pies; she dresses up, makes calls, etc. She enacts in her own small sphere all the activities which she observes in the larger world about her, and by so doing is educating herself in the duties and conventions of life. Likewise the small boy, when he plays at being a carpenter, an expressman, an engineer, a horse, etc., is acquainting himself with the customs and actions of people and things about him. The motive back of the physical expression of these mental images is desire for and love of activity, pleasure in movement. The results, in terms of education, are growth in the power to observe, to imagine, to accumulate and organize knowledge of environment, and to express these in body movement, a training of the motor machinery of the body. As civilization advances, and we become more and more a city-dwelling people and, worse still, a population of dwellers in apartments, in which there is neither space nor provision for children's play, we

row farther removed from the environment in which self-education beyond the earliest years of childhood is possible. We are, therefore, to a greater or less degree, obliged to substitute for nature's way, schools, courses of study, planned exercises, supervised play. That is, planned and organized efforts to educate take the place of the spontaneous education of earlier childhood.

We have made only a beginning toward recognizing the biologic development of the human species in the planning of our courses of study and other school exercises. In this rapidly moving, utilitarian age, our educational systems are swept along in the hurrying stream of man's restlessness. We are overanxious to advance children's education rapidly; we begrudge the time it takes to develop normally and naturally; we resort to kindergarten and pre-kindergarten methods of shortening the period of self education. We hurry the children through his stage and hasten their entrance into the artificial atmosphere of the school. We have not heretofore understood nor appreciated the meaning and value of play. We are only beginning now to believe, and only in a few places do we believe to the point of providing ample time for it, that play is a great means of real education for the young child. We are far too prone to regard play only as a means of expending superfluous energy; a safety-valve, as it were, for pent-up steam; as amusement or recreation only. Play is all of these, and it is vastly more. It is a tremendous power in the advancement of the educational trinity—physical, mental, and moral development.

Education in earliest childhood is begun spontaneously and with bounding joy. It finds expression in physical activity—work—carried cheerfully to the point of fatigue. It appears as if our scheme of education has somewhere gone wrong, as if some cog in the machinery of our school system has slipped, when this joy in work degenerates so soon into mere lip service; when education becomes an irksome task, a kind of drudgery, a thing to shirk and escape from, and, because of the failure to maintain the natural balance between mental and physical activities, results so frequently in the physical deterioration of the young people who pursue our school courses to their prescribed length. But children must learn to do hard work. Some one has said, "The measure of the value of play is the amount of work in it, and the measure of the value of work is the amount of play in it." To this another has added, "It is doubtful if a great man ever accomplished his life work without having reached a play interest in it."

So, if from the early childhood period, when work is all play, we could carry over the joy, zest, keen interest, intense desire to create, to express, into that period when, under our present system, work is apt to become all drudgery, we should be able to make the connection between work and play and so preserve for our children some of the real love for and pleasure in work for work's sake that they have now in play for its sake.

We recognize distinct periods in the growth of a child: infancy, first dentition, second dentition, pre-puberty, puberty, adolescence, post-adolescence, etc. There are likewise stages of irresistible impulses to actions of certain kinds; periods when certain activities are so prominent as to appear almost instinctive. Professor James in his chapter on "Instinct" speaks of the transitoriness of these instincts. He says: "If environment is favorable for the manifestation of these instinctive acts, a habit will be formed, but if the environment is unfavorable, the instinct fades away, and no habit is set up, however favorable the environment later may be." He says also (Vol. II, p. 400): "We see the law of transiency corroborated on the widest scale by the alternation of different interests and passions as life goes on. In all pedagogy the great thing is to strike while the iron is hot; to seize the wave of the pupil's interest in each successive subject before its ebb has come, so that knowledge may be got and a habit of skill acquired. . . . The natural conclusion to draw from this transiency of instincts is that most instincts are implanted for the sake of giving rise to habits, and this purpose once accomplished, the instincts themselves as such have no reason further to exist in the physical economy, and consequently fade away."

From the above quotations we may certainly conclude that the play impulses of children serve the great purpose of setting up habits and giving rise to permanent interests. There is a time when children are keen in their desire to learn to skate, dance, swim, play ball, etc. They will expend an enormous amount of energy and endure fatigue to the point of exhaustion to become expert in these sports. This, then, is the age when they should learn these things or be afterwards deficient in them and the particular training they give. There is a time when the habit of physical activity, the habit of work and the enjoyment of work, the habit of industry, may be formed. The great opportunity and responsibility of parents and teachers lies in recognizing this and in setting about to form a right connection between play

and work. The interests, impulses, tendencies, and activities of children of a given age become intelligible to us if we can believe with Dr. Gulick that "children in their plays live over the historic activities of their race, harking back through countless generations of human evolution." Our sympathetic understanding of children's play will be greatly broadened if we can realize how basic it is to their physical, moral, and mental development, and how bound up in play are all the thoughts, emotions, feelings, acts, imaginings, expressions of childhood.

Groos has shown two entirely distinct ways of using play in education: the one, by introducing the play spirit into otherwise more or less uninteresting school subjects; the other, by employing play itself as a means of development. Kindergartners, from Froebel to Mme. Montessori, employ the first method when they utilize the play element in the occupations, games, and gifts used in the kindergarten. Many successful teachers make use of the same instinct further along in the school course. They are able to seize the dominant interest of the children, and so to carry over into the piece of work to be accomplished the enthusiasm of play. This, however fundamental it is, must not be confused with real, genuine, spontaneous play used as a means of development. For obvious reasons, we shall omit from this discussion the plays of infancy, through which children gather during the first three or four years of their lives, by observation, imitation, and contact, an enormous fund of knowledge of their environment. We shall begin rather with children as we find them when they first come to school.

At the age of five or six years the children's impulses express themselves in free, active, spontaneous plays. Their individual concepts are very simple and crude. They are strongly individualistic, have no interest in group games of any kind. They are essentially non-social. Interest is centered in the activity itself. The motive is joyful use of their own bodily powers for the pure fun of the doing. They care not at all for the rule of the game. They are not respecters of traditions. Each is a law to himself. Frequently one must guess long and hard to interpret some pose or movement which is very evidently a source of joy to the small performer, as when in playing soldier we had looked for the firing of the traditional gun and were given instead a frantic waving of the hand over the head. The expression mystified us, until we were gleefully told, "The soldier is wig-wagging." Or when a little girl playing "When I Was a Lady," fumbled mysteriously with her hands. We guessed everything a lady could be doing but could not

hit upon the right thing, and were demurely told, "I am going out calling and am putting my handkerchief into my purse." Their native interest at this age is in such race-old activities as running, climbing, jumping, pulling, pushing, throwing, digging, etc., through which the large fundamental groups of muscles are developed. Given a favorable opportunity, these instincts will find expression in self-made games and plays. In city communities, however, where space is restricted, where there are large groups of children or where other circumstances make it impossible to enjoy unrestrained liberty, we may have to substitute various games of chase, as running tag, hopping tag, stooping tag for the free running. In lieu of fences and trees to climb, we may have ladders, poles, swings, and ropes. Instead of throwing stones, we may throw balls and bean bags. The imitative impulse may express itself by playing horse, bear, fireman, soldier, circus, musician, train, auto, etc. In these varied dramatizations of the countless things about them, the children externalize concrete mental images. The result is true individual expression. Children of this age are imaginative and inventive to a marvelous degree. They enjoy games with much repetition but of short duration, in which the climax is quickly reached, which make very slight demand upon the attention and require very small endurance.

At eight or nine years of age, children are still quite strongly individualistic, but the motive for physical activity is no longer purely a love of motion. The interest in play shows a sign of shifting a little from mere joy in activity itself to some interest in the end to be attained. Here we have a vague dawning of the "social consciousness." The desire to become recognized members of the group leads them to notice their companions more and to compare and measure themselves somewhat by the attainments of others of the group, and results in greater effort to acquire skill. Free, spontaneous plays still hold the largest share of interest. There should be provided ample opportunity for running, climbing, jumping, swimming, skating, dancing, etc. Enjoyment of spontaneous dramatization and love of imitation find expression in such singing, acting, and rhythmic games as "The Jolly Miller," "Oats, Peas, Beans and Barley Grow," "Go Round and Round the Village," "Musicians," "Merry-go-round," "Shoemaker Dance." In these, customs, manners, and occupations are mimicked or faithfully reproduced. The love of running, dodging, chasing, and escaping is satisfied by such games as "Fox and Geese," "Cat and Mouse," "Run

Sheep Run," "Frog in the Middle," "Black Man," etc. In games of this type there is a very slight advance in organization, in that there are "sides" more or less loosely bound together, one of which is the chasing party, while the other tries to escape. All players are equally active, one "side" merges into the other during the progress of the game. The rules are few and simple. There is the added appeal to the imagination. At this period also, if opportunity is given for expression, there will be found considerable interest in constructive play. This is manifested in building crude houses, huts, tents; in digging caves; in cutting and dressing paper dolls. It is the time, too, when girls delight in such games as "Hop Scotch," "Jacks," and jumping rope, while boys take to marbles, tops, kites, and the like, by which the finer motor coördinations are exercised and established. Here also guessing games, riddles, and puzzles, games in which ear-training, observation, and the touch sense are prominent, are favorites. Now is the time to make use of this interest, to educate the senses and develop concentration of thought. "Blind Man's Buff," "Ruth and Jacob," "Simon says: 'Thumbs Up,' " "Trades," "Beast, Bird or Fish," etc., are games of this type.

In the next age-group—ten or eleven to twelve or thirteen years—there is a more marked change in the trend of interest in games and plays. The children are less individualistic, the motive for the activity is more subjective, there is the dawn of the desire to organize, that is, to have "sides" or "teams." The end to be attained takes on equal importance with the joy in the activity itself. Games with "real rules" are desired, and the game must be of such a nature that one side may win. The real "team spirit" is, however, still quite vague. Each boy believes himself to be the team. Experience points to the conclusion that girls linger much longer in the individualistic, selfish play stage, and as a rule develop team spirit—the submerging of self for the good of the team—more slowly than do boys. This is the more curious because girls of this age are nearer to maturity than boys of the same age, and for this reason we might expect a broader development of the social motive in the girls.

The free, unsupervised activity of boys of this group expresses itself in a desire to test strength, skill, speed, and endurance with their companions in running, climbing, jumping, wrestling, racing, skating, swimming, etc. Ambition to attain physical fitness, to excel their mates, supplies the motive for practice in these activities. Both boys

and girls should have attained a reasonable degree of proficiency in such accomplishments as swimming, skating, and dancing by the end of this period, as this is the age most suitable for acquiring skill and perfecting such co-ordinations. Afterwards they are achieved, if at all, literally by "the sweat of the brow."

Interest in games of chasing and hunting and the like is still keen, but the game content expands, and the motive changes. There must be difficulties to encounter, obstacles to overcome, which will test the skill, speed, endurance, and strength of the players as never before, so that they may measure themselves with others. Hence, we have the more co-operative games and group contests, such as relay races, "Prisoner's Base," "Stump the Leader," "Hare and Hounds," and the countless varieties of ball games. The boys at this age delight, too, in doing "stunts" which display and develop skill, as hand-springs, cart-wheels, head-stand, wrestling, tumbling, and things of the kind.

We have at this age opportunity for fostering native interests in solving riddles and acrostics, acting proverbs and charades, by providing opportunity for full, free, spontaneous expression of such simple dramatizations as the children can initiate. We observe, however, a divergence of boys' and girls' interests. Boys find outlet for imagination and creative impulse in playing circus, Buffalo Bill, minstrel show; in organizing clubs and gangs; in the boy scouts; in forming wig-wag groups, etc. Girls show a preference for the traditional or occupational games and dances—playing house, playing lady, dressing up, acting, etc., all of which present suitable opportunities for expression of the dawning emotions of this pre-adolescent age.

In the next age-period—twelve or thirteen years to fourteen or fifteen years—as boys begin and girls complete the physical manifestations of the sex characteristics, we notice great divergence of the play interests of the two groups. We may admit many advantages resulting from having boys and girls of this age play together, but experiment and experience in this school have proved that the necessity of providing means for the best development of each group demands that the boys and girls now be separated for their play. Boys will now put into their games that degree of energy, skill, inventiveness, and sheer physical force required for building up muscle bulk, physical courage, and endurance for the demands which the future will make upon them. Such physical and nervous stress and strain the girls at this critical period of their development should not be allowed even to ap-

broach. Unwise interference with this law of nature results either in an expurgated style of game which retards development and kills interest for the boys, or it forces girls, in their ambition to equal the boys, to expend energy fruitlessly. Boys are now immeasurably in advance of girls in skill, endurance, speed, and team spirit, and age for age girls do not catch up again. The girls of our high school illustrate the point. They play basket-ball and baseball with great enthusiasm, unusual skill, and considerable technical knowledge. Few girls of the same age could outplay them. Yet each year, a group of seventh or eighth grade boys challenges the girls to a game of baseball and beats them or makes it exceedingly difficult for the girls to win.

There lingers still at this age a tendency to imitate. It is manifested now in hero worship, or in growing attachments for older pupils or teachers. The glamour with which they surround members of school athletic teams, the attempts to walk, speak, gesture, or "use the eyes," as some older associate does, are expressions of the same instinct which in the earlier period were expressed in playing soldier, fireman, etc. The tendency now, however, is to set up ideals and to be greatly influenced by the words, acts, and manners, of these heroes and heroines. So we observe here a tremendous broadening of the "social consciousness." Individualism merges into group, class, team, or school feeling. The games enjoyed express this expanding of the self and take on the more highly organized, competitive features in which teams and clubs are formed, and the individual is lost in the desire to further the interest of the team. Baseball, football, volley-ball, basket-ball, tennis, and games of the sort predominate. These test the ingenuity, strength, courage, endurance, and prowess of the players and engender respect for these qualities in others.

Constructive play, if allowed expression, here reaches its climax, the motive for creating being now to make something which can be used. Boys delight in making or building such things as bird houses, canoes or boats, engines, bridges, automobiles; in fitting up dark rooms for photography, print-shops, telephone or wireless stations, gymnasiums. The girls' natural instincts flower in making fancy work, embroidering, decorating or rearranging their own rooms, modeling in clay, making articles of personal adornment, making or retrimming hats, devising new trimming for dresses or waists, etc. It is an age of considerable emotional instability, of physical awkwardness in boys and self-consciousness in girls. Newly awakened feelings and ambi-

tions run beyond the skill adequately to express; hence we find less freedom of expression, more sensitiveness to ridicule, greater fear of failing in an attempt, and consequently reluctance to try new or unusual things or those which have the appearance of difficulty. The tendency is to engage in the sports and play the games for which one has natural aptitude, and in which a certain degree of success is assured, and to neglect or even to dislike others in which one has developed no proficiency. This marks the beginning of the desire to specialize. If this is the desire merely to escape from effort which for the time seems disagreeable to the individual, it should not be indulged. The ingenuity of a teacher will very probably be taxed to keep alive sufficient interest in games and sports to carry the boy or girl over this period of loss of confidence in self. We cannot allow failure for want of effort. Frequently, the only motive for trying at all is the word of appreciation or praise from a teacher or the shout of approval from companions. When whole or partial success crowns repeated trials, wholesome self-assurance is restored, belief in one's ability revives. It is easier to make the effort next time, for nothing succeeds like success.

Beyond this age, through the high-school and college period, play interests grow more and more specialized. Fewer games, these more highly organized and strongly competitive in character and played with intensity, is the rule. Competition is highly individual and at the same time intensely co-operative. Team play reaches its height. Ambition to win the cheers and approbation of fellow students, to be a part of a victorious team for the glory of the alma mater, acts as a powerful stimulus which impels to enormous output of energy. If this were always under the guidance of men and women directors of high morality, who would keep this tremendous motive pure and direct it toward the high goal of personal service and self-sacrifice, and who would preserve integrity and honesty at any cost, we should have growing up a body of young people who would learn not only how to succeed but how to bear defeat cheerfully, to value energetic action, fair play, courage, perseverance, individual effort, and co-operation. With this training in their plastic youth, we might trust them to act well their part in the adult game of life, with its emergencies and endless anxieties. Without this careful guidance, it is not difficult to imagine the reverse of this picture.

Later still, in middle life, if games are played at all, there is a re-

turn to the individual type of which golf is a good example, the motive being usually one of preservation of health in counteracting too sedentary employment.

This is in a general way the story of the play interests of children as manifested in the different periods of their growth and development. The word *play* has throughout been used in a comprehensive way, as including free play, games, dancing, athletics, and all that group of physical activities in which the muscles of the body are used vigorously, and through which the present conformation of the body has been achieved and maintained. Viewing play interests in some such light as is here presented, we cannot believe them to be casual, incidental, without purpose. We are led rather to feel that nature has by these means provided for the education of her children. Through play they learn the use of the parts of their body and grow strong, vigorous, and enduring in the learning. Senses are quickened, observation is stimulated, action and reaction toward environment is intensified. Sluggish, inactive, lethargic children become alert and resourceful and learn to subdue or overcome, or to act in harmony with people and things about them. There is no better way to develop and train self-control than through play and the quick response that is necessary in adjusting oneself to the evershifting chances of the game. For adolescent children, in the height of a lively game of basket-ball, to remember that they must play only when their turns come and to be ready instantly to seize the ball, to choose without hesitation the best play to be made, to decide, without time for reflection, which is the fair, which is the unfair thing, and to act with the rapidity of thought on that choice, is to possess a balanced power of impulse and expression which goes far toward the development of resourceful, dependable, controlled citizens. In games, therefore, we see the finest possible opportunity for inculcating in our young people prompt, unquestioning obedience to law, honesty, generosity to an opponent, fairness, justice, co-operation, contempt for fraud, disdain of subterfuge or evasion of the law, loyalty, recognition of the rights of others, appreciation of strength and nobility in others. To have this foundation of right thinking and right acting laid in the habit-forming adolescent years of youth would count incalculably toward the uplift of the community. When children's play is better understood, when we realize what intrinsic power for character-building lies in *rightly conducted games*, we may look for less selfishness, greed, corruption, and

graft in the larger civic affairs of the community; for the morality or immorality of the one is very closely bound up with the morality or immorality of the other.



ORAL READING

Are we not well on our way toward establishing a sound literary habit when the children of the fourth, fifth, and sixth grades have acquired an appreciation for the best literature that is within their grasp, and also have memorized understandingly a collection of verse with which they may express, in higher words, their gladness, sorrow, wonder, and aspirations? They then have, as their own, verse that will serve as an outlet to their emotions.

Children in these grades, having a keen enjoyment in reading orally a group of poems, have been found to retain their pleasure, and also their power to move others in the reading, throughout the high school. I am asked to tell some of the things that go into the teaching that perhaps help to fix this habit of expressing forcibly, and with undiminished delight, the lines of the poets.

To begin with, only that which has recognized literary worth is given the children. The teacher is thoroughly familiar with the lines. Indeed, after considering the purpose of the poem and the maturity of the class, she chooses largely from the poems she likes best. This, not to impress her interpretation upon the children, but (aside from all pedagogic reasons) because, having herself some sentiment for the selection, she will not permit a dazed, obscured imagery or accept a half-rendering.

As a rule, the poem is first read aloud by the teacher in a genuine, convincing manner, that the class may hear it as a whole. If it requires a setting, an introduction, the explanation of unusual or unfamiliar words, this is given before the reading. The presentation of the poem may differ with every class.

In the sixth grade, Gerald Gould's "Wander Thirst" was the first of a group of poems on wandering. Each child had a copy. The informal introduction was somewhat as follows:

"I found this poem in England. The first line sounds as if the poet, Gerald Gould, might have written it there;

'Beyond the East the sunrise, beyond the West the sea,'
but the longing, the thirst to wander, comes to people of every nation.

I recognize parts of the poem as my own experience. Perhaps you will."

WANDER-THIRST

Beyond the East the sunrise, beyond the West the sea,
And East and West the wander-thirst that will not let me be;
It works in me like madness, dear, to bid me say goodbye;
For the seas call, and the stars call, and oh! the call of the sky.

I know not where the white road runs, nor what the blue hills are,
But a man can have the sun for friend, and for his guide a star;
And there's no end of voyaging when once the voice is heard,
For the river calls, and the road calls, and oh! the call of a bird.

Yonder the long horizon lies, and there by night and day
The old ships draw to home again, the young ships sail away;
And come I may, but go I must, and if men ask you why,
You may put the blame on the stars and the sun and the white
road and the sky!

Gerald Gould

One child, who during the vacation had developed a longing to wander down the country road or off into the narrow woods along the beach to explore, and who had confided in his mother, asking to be trusted to go alone at times, found an expressin here for his vacation longings, which were normal enough. The poem also served, in a way, as a link to the school-life. To this day (four years later) he reads the lines with great power and charm. The poems of wandering seem to fill a need for children of the sixth-grade age, the craving for adventurous travel, the yearning to explore.

When we read Björnstjerne Björnson's "Over the Mountains High," we have before us a large, inspiring colored print of the Geiranger Fjord and mountain walls. In a few words we discuss that mountainous country, Norway, where the people of one valley may differ in customs and costumes, even in speech, from the folk of the next valley; how with the lure of the ever-present water, the fjord, lake, river, or sea, and the grim ranges, it is natural enough to want to know what is on the other side; and when one gets to the mountain-top, there stretches out, as far as eye can reach, range after range of mountains. How one longs to know what is beyond!

OVER THE MOUNTAINS HIGH

What shall I see if ever I go
Over the mountains high?
Now, I can see but the peaks of snow,

Crowning the cliffs where the pine trees grow,
Waiting and longing to rise
Nearer the beckoning skies.

The eagle is rising far away,
Over the mountains high,
Rowing along in the radiant day
With mighty strokes to his distant prey,
Where he will, swooping downward.
Where he will, sailing onward.

Apple tree, longest thou not to go
Over the mountains high?
Gladly thou growest in summer's glow,
Patiently waitest through winter's snow;
Though birds on thy branches swing,
Thou knowest not what they sing.

Birds, with your chattering, why did ye come
Over the mountains high?
Beyond, in a sunnier land ye could roam,
And nearer to heaven could build your home;
Why have ye come to bring
Longing, without your wing?

Away! I will away, afar away,
Over the mountains high!
* * * * *

Let me in freedom fly!
Not beat on the walls and die!

Björnstjerne Björnson

Much questioning does not reach our end. The questions come from the children. The teacher need not ask one, unless the reading shows lack of comprehension. Often, reading as though he were the Norwegian down in the valley, the self-conscious child loses himself in the semi-impersonation.

A magazine plate of a lumbering galleon, and a gallant pirate or two, give color to "The Buccaneer."

THE BUCCANEER

The Sailing

Greet ye the morning, laugh her up
And sing the sun below,
For it's out wi' me to the Carib sea
Where the scented east-winds blow;

Oh, the day is new, and the galleons few
 That cling to the desperate rendezvous
 We know, we know,
 So lay your lingering steel away
 And seamen be for another day.
 For another sun, and our goal is won,
 Out on the Carib sea.

For Harnadino Harbor lies
 But fifty leagues ahead,
 So an' we speak no sail this week
 We dine on Spanish bread;
 So an' we grip no scented ship
 There's a fairer goal to our golden trip
 I' the bay, the bay;
 So handle your hemp as ye polish your steel,—
 There's gold in the offing. War's at the wheel,
 And you're out wi' me to the Carib sea,
 Out to the Carib sea!

The class recognize in this a different type of wandering. There is a pleasant little chill that creeps up one's back when he reads the pirate captain's words, but they are hearty, vigorous, dramatic words, with a glint of good humor. The girls are glad they don't live in the days; the boys, instead of inhibiting their pirate tendencies, ease their souls in a free expression. Who will care to be Willie or Johnnie Ann, when it is a live pirate who speaks?

The historical times are briefly recalled when vessels, laden with gold from South America, or with other rich cargo, were often seized by the buccaneers and when even wealthy ports were in danger of the daring attacks.

The Caribbean Sea, with the spicy east winds, the lonely, desperate meeting-place, the surety of the captain that if they fail to get this they will fall upon that booty, the eager cutlass that one sees glistening between the handling of ropes and other seaman duties, the certainty of the fight, evoke clear images. Questions asked by one child are answered by half a dozen others, but the interpretations must be based largely upon the words of the poem. He who offers an opinion reads the lines that make him believe as he does.

Some years ago two of our ninth-grade boys set "The Buccaneer" to music. When the children are familiar with the lines, they are told of this high-school achievement, and they hear the piece played on the piano. By the second time it is played, every child is fitting the words



Greet ye the morn-ing, laugh her up, And
For Har - na - di - no har - bor lies But



sing the sun be - low For it's out wi' me to the
fif - ty leagues a - head; So an' we speak no



Ca-rib sea Where the scent-ed east winds blow Oh the
sail this week We dine on Span-ish bread;



day is new, and the gal-leons few, That cling to the desperate
So an' we grip no scent-ed ship, There's a fair-er goal to our



ren-dez-vous We know we know
gol-den trip I' the bay the bay



So lay your ling'ring steel a - way, And
So handle your hemp as you pol-ish your steel, There's



sea-men be for an-oth-er day For an-oth-er sun and our
gold in the of-fing war's at the wheel, And you're out wi' me to the



goal is won, Out on the Ca - rib sea.
Ca - rib sea, Out to the Ca - rib sea.

1. THE BUCCANEER

to the music. Then there comes the day when we are invited to music room to hear the high-school boys (bass group) sing it for benefit. The deep bass voices always impress. The big boys know power here, the little boys make up their minds to sing like that day; we really must hear it sung a second time, there is a ripp appreciation, and "The Buccaneer" is ours.*

In preparing a poem for morning exercises, the children are concerned chiefly with getting others to understand and care for poem as they do. Self-consciousness is lost, or at least controlled the joy of the thing and in the desire to share it at its best. Under these conditions, the voice grows richer and fuller and more beautifully modulated. The class becomes convinced of the importance of everybody's hearing what is said. Since it has taken some student to get at the meaning, and the audience is to get it at one reading, the reader must make the pictures clear and must read convincingly; and the listener in order to read convincingly must themselves clearly understand. The reading should be slow enough not to crowd the images upon the listener. The thought to be expressed should be kept uppermost. The rhythm should not be obscured, since the poet strengthens his appeal by the form he chooses.

The following shows how a class tried to state the successive pictures in Browning's "Home Thoughts from Abroad," using words of the poet. Each picture was offered by a different child. Such words as "bole," "chaffinch," "dower," etc., were well understood.

IN APRIL

Oh, to be in England now!
Some morning, before you are aware, spring has come.
The lowest boughs and the brush-wood sheaf
Round the elm-tree bole, are in tiny leaf.
The chaffinch sings on the orchard bough.

IN MAY

The whitethroat builds, and all the swallows.
Do you see my blossomed pear tree in the hedge, that
 leans to the field?
It scatters on the clover, blossoms and dewdrops.

*In the Second Year Book you have been told how these very poems, with "Lake Isle of Innisfree" and Kipling's "The Explorer," were given in a morning exercise, the high-school boys singing "The Buccaneer" and Schubert's "Wanderer," and a parent of the grade singing "The Flying Kite," by Eleanor Smith.

In that tree, at the bent spray's edge, sits the wise thrush.
 He sings each song twice over (lest you should think he
 couldn't again sing the first fine careless rapture).
 The fields look rough with hoary dew.
 The noontide will waken the buttercups.
 Everything will then be gay.
 The gold buttercups are the dower of the little children.
 They are far brighter than the gaudy melon flower.

At a second effort, the lines of the poem were used with no interpolations.

APRIL IN ENGLAND

Oh, to be in England
 Now that April's there,
 And whoever wakes in England
 Sees, some morning, unaware,
 That the lowest boughs and the brushwood sheaf
 Round the elm-tree bole are in tiny leaf,
 While the chaffinch sings on the orchard bough
 In England—now!

And after April, when May follows,
 And the whitethroat builds, and all the swallows!
 Hark, where my blossomed pear tree in the hedge
 Leans to the field and scatters on the clover
 Blossoms and dewdrops—at the bent spray's edge—
 That's the wise thrush: he sings each song twice over,
 Lest you should think he never could recapture
 The first fine careless rapture!
 And though the fields look rough with hoary dew,
 All will be gay when noontide wakes anew
 The buttercups, the little children's dower,
 Far brighter than this gaudy melon flower!

Browning

Notice the succession of pictures breathing Spring in Thomas Nash's lyric:

SPRING

Spring, the sweet Spring, is the year's pleasant king;
 Then blooms each thing, then maids dance in a ring,
 Cold doth not sting, the pretty birds do sing—
 Cuckoo, jug-jug, pu-we, to-witta-woo!

The palm and May make country houses gay,
 Lambs frisk and play, the shepherds pipe all day,
 And we hear aye birds tune this merry lay—
 Cuckoo, jug-jug, pu-we, to-witta-woo!

The fields breathe sweet, the daisies kiss our feet,
 Young lovers meet, old wives a-sunning sit,
 In every street these tunes our ears do greet—
 Cuckoo, jug-jug, pu-we, to-witta-woo!
 Spring, the sweet Spring!

THE EAGLE

He clasps the crag with hookéd hands;
 Close to the sun in lonely lands,
 Ring'd with the azure world, he stands.

The wrinkled sea beneath him crawls;
 He watches from his mountain walls;
 And like a thunderbolt he falls.

Alfred, Lord Tennyson

We are illustrating the poem. We go to the Academy of Sciences to draw the mounted eagles there. Some put energy upon the hooked claws; others the beak and the cruel, clear eye; others the outstretched wings. These are practice sketches for the main picture which each works out for himself. Lines are quoted here and there to explain the drawing. A child, indicating his work, will say to the teacher, "He clasps the crag with hookéd hands"; or, with a dramatic sweep of his brush, "Ringed with the azure world, he stands." At Lincoln Park we paint or sketch live eagles. Some of us go over to the high bridge to look down upon the wrinkled lake. The second stanza from "Over the Mountains High" is recalled. We hear MacDowell's "The Eagle" played on the piano. The majesty of the bird, as we have come to know him, is unfailingly well expressed in our reading of Tennyson's lines.

Clearing images does not mean that the poem will lie before the child in shreds; it does not mean over-analysis. There will be regions free for his imagination to soar, and for further discovery. His joy in the poem is all essential. Usually, the selection contains more than the child's present power can wrest from it. But the main ideas, the big pictures, are to be clear.

Sometimes the rhythm, the illusive fancy, the music of the lines, lend the charm.

Where the bee sucks, there suck I:
 In a cowslip's bell I lie;
 There I couch when owls do cry:
 On the bat's back I do fly

After summer merrily.
Merrily, merrily, shall I live now,
Under the blossom that hangs on the bough!

Shakespeare

In the reading of Browning's "How They Brought the Good News from Ghent to Aix," the onward movement of those horses must be maintained: the galloping hoof-beats ring throughout the poem (this without hurried reading or monotonous sing-song); towns are sighted, reached, passed; nor gallops less steadily Roland a whit through any part of that terrible journey.

To show how large a part this rhythmic beat may play in a poem, and to help the class recognize its place and importance, the teacher reads, after appropriate setting and explanation, Browning's "Through the Metidja to Abd-el-Kadr," omitting perhaps the third stanza. The text is not put into the hands of the children.

At another time, and for a different purpose, the teacher reads to them Browning's "Mulékkeh." The text of this they will not see until they reach the high school or later, but the story is thoroughly enjoyed. The experience of hearing the teacher read easily and well, undoubtedly influences for good the timid and self-conscious.

Those who read joyously and intelligently are often called on to read first, not only for the example but that the others may warm to the joy of self-expression. The poorer readers are given a few lines to begin with, the interpretation of a line, which many others will also interpret, or perhaps in answer to a question, they read a line. But this must be well expressed, and time may be taken here to get such expression, since the movement of the whole story is not interrupted. Frequent opportunities of this kind make for ease and assurance. It is the honest, successful self-expression that helps create a sentiment for oral reading.

After the first reading of Browning's "Hervé Riel" (which is the only time the teacher ever reads it to the class), the members of the group piece out the story, the essentials of which are unfailingly stated, but differences of opinion and general difficulty with certain passages demand study of the poem.

HERVÉ RIEL

I



On the sea and at the Hogue, sixteen hundred ninety-two,
Did the English fight the French,—woe to France!

And, the thirty-first of May, helter-skelter through the blue,
Like a crowd of frightened porpoises a shoal of sharks pursue,
Came crowding ship on ship to St. Malo on the Rance,
With the English fleet in view.

II

'Twas the squadron that escaped, with the victor in full chase;
First and foremost of the drove, in his great ship, Damfreville;
Close on him fled, great and small,
Twenty-two good ships in all;
And they signalled to the place
"Help the winners of a race!
Get us guidance, give us harbor, take us quick—or, quicker still,
Here's the English can and will!"

III

Then the pilots of the place put out brisk and leapt on board;
"Why, what hope or chance have ships like these to pass?" laughed the :
"Rocks to starboard, rocks to port, all the passage scarred and scored,  d,
Shall the 'Formidable' here with her twelve and eighty guns
Think to make the river-mouth by the single narrow way,
Trust to enter where 'tis ticklish for a craft of twenty tons,
And with flow at full beside?
Now 'tis slackest ebb of tide.
Reach the mooring? Rather say,
While rock stands or water runs,
Not a ship shall leave the bay!"

IV

Then was called a council straight.
Brief and bitter the debate:
"Here's the English at our heels; would you have them take in tow
All that's left us of the fleet, linked together stern and bow,
For a prize to Plymouth Sound?
Better run the ships aground!"
(Ended Damfreville his speech.)
"Not a minute more to wait!
Let the Captains all and each
Shove ashore, then blow up, burn the vessels on the beach!
France must undergo her fate!"

V

"Give the word!" But no such word
Was ever spoke or heard;
For up stood, for out stepped, for in struck amid all these
—A Captain? A Lieutenant? A Mate—first, second, third?
No such man of mark, and meet
With his betters to compete!
But a simple Breton sailor pressed by Tourville for the fleet,
A poor coasting pilot he, Hervé Riel the Croisickese.

VI

"What mockery or malice have we here?" cries Hervé Riel:
 "Are you mad, you Malouins? Are you cowards, fools, or rogues?
 Tell me of rocks and shoals, me who took the soundings, tell
 me in my fingers every bank, every shallow, every swell
 'twixt the offing here and Grève where the river disembogues?
 Are you bought by English gold? Is it love the lying's for?
 Morn and eve, night and day,
 Have I piloted your bay,
 Entered free and anchored fast at the foot of Solidor.
 Turn the fleet and ruin France? That were worse than fifty Hagues!
 Sirs, they know I speak the truth! Sirs, believe me there's a way!
 Only let me lead the line,
 Have the biggest ship to steer,
 Get this 'Formidable' clear,
 Make the others follow mine,
 And I lead them, most and least, by a passage I know well,
 Right to Solidor past Grève,
 And there lay them safe and sound;
 And if one ship misbehave,
 Keel so much as grate the ground,
 Why, I've nothing but my life,—here's my head!" cried Hervé Riel.

VII

"At a minute more to wait.
 Steer us in, then, small and great!
 Like the helm, lead the line, save the squadron!" cried its chief.
 Captains, give the sailor place!
 He is Admiral, in brief.
 Fill the north-wind, by God's grace!
 See the noble fellow's face
 Steer the big ship, with a bound,
 Clears the entry like a hound,
 Deepens the passage as its inch of way were the wide sea's profound!
 See, safe through shoal and rock,
 How they follow in a flock,
 Not a ship that misbehaves, not a keel that grates the ground,
 Not a spar that comes to grief!
 The peril, see, is past,
 We are harbored to the last,
 And just as Hervé Riel hollas "Anchor!"—sure as fate
 As the English come—too late!

VIII

As the storm subsides to calm:
 They see the green trees wave
 On the heights o'erlooking Grève.
 Hearts that bled are stanch'd with balm.
 Just our rapture to enhance,

Let the English rake the bay,
 Gnash their teeth and glare askance
 As they cannonade away!
 'Neath rampired Solidor pleasant riding on the Rance!"
 How hope succeeds despair on each captain's countenance!
 Out burst all with one accord,
 "This is Paradise for Hell!
 Let France, let France's King
 Thank the man that did the thing!"
 What a shout, and all one word,
 "Hervé Riel!"
 As he stepped in front once more,
 Not a symptom of surprise
 In the frank blue Breton eyes,
 Just the same man as before.

IX

Then said Damfreville, "My friend,
 I must speak out at the end,
 Though I find the speaking hard.
 Praise is deeper than the lips:
 You have saved the king his ships,
 You must name your own reward.
 'Faith, our sun was near eclipse!
 Demand whate'er you will,
 France remains your debtor still.
 Ask to heart's content and have! or my name's not Damfreville."

X

Then a beam of fun outbroke
 On the bearded mouth that spoke,
 As the honest heart laughed through
 Those frank eyes of Breton blue:
 "Since I needs must say my say,
 Since on board the duty's done,
 And from Malo Roads to Croisic Point, what is it but a run?—
 Since 'tis ask and have I may—
 Since the others go ashore—
 Come! A good whole holiday!
 Leave to go and see my wife, whom I call the Belle Aurore!"
 That he asked and that he got—nothing more.

Robert Browning

A stanza such as the fifth, which at first seems bristling with *mis-*
 placed words and punctuation, proves simple enough upon study *and*
can never again be read without thinking. Reading is thinking.

"What happened that the word to destroy the fleet was *never*
 given? Who stood up, who stepped out, who struck in? Was it *a*

captain? Was it a lieutenant? Did a first mate, or a second, or a third mate speak out? No such man of distinction and equal to compete with his betters! Who was it?" Every member of the class knows **it was** a simple Breton sailor who spoke, and some will explain that he **had** been pressed into service by Tourville—this poor coasting pilot, **Hervé Riel**, of Croisic Point. "And what did he say to the astonished officers and men?"

The children live in his words, and in the events that follow. **They** fairly hold their breath until the last ship is anchored. **How they** laugh with the French, as they rock up and down on the River Rance, safe from the English bombardment! How they join in that **shout** of gratitude and praise! How they admire the man as he **stands** before them! Hervé Riel's reasons for asking anything **what-ever** in return for his services are eagerly worked out. That he does **not** name a substantial reward always brings about lively discussion.

A third, fourth, and fifth reading may discover new difficulties, **new** questions, most of which are elucidated by the class. But there **has** been given a background for sympathetic and intelligent oral reading, and the dramatic possibilities, too, make the poem the great **favorite** it becomes.

So it is that with clear, growing images, with the joy of the **poem** at heart, and with the desire to share this treasure, the child **overcomes** obstacles. The whole child is engaged with the matter in **hand** and revives what threatened for a time to be a lost art, the art of **oral** reading.



Let the English rake the bay,
 Gnash their teeth and glare askance
 As they cannonade away!
 'Neath rampired Solidor pleasant riding on the Rance!"
 How hope succeeds despair on each captain's countenance!
 Out burst all with one accord,
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THE VALUE, PLACE, AND USE OF THE DRAMATIC INSTINCT IN THE EDUCATION OF YOUNG PEOPLE

The complexity of modern civilization has made its demand keenly felt in the school. If a study is to hold a place in the crowded curriculum and is to share the value and limited time devoted to school life, it must establish its claim by proving that it is of real importance in the true education of the individual.

What is the value of the dramatic instinct in the education of young people? How great a place shall it occupy? How shall we best use it? The claim that the exercise and direction of the dramatic instinct is essential to self-realization and to the development of the efficiency and power of the individual as a member of the social group can be substantiated from the standpoint of psychology, pedagogy, ethics, and esthetics.

As we shall use the term *dramatic*, we shall not refer merely to the giving of a play, but shall use the word in a much broader sense, that of the dramatic instinct, exercised as a mode of thinking, of feeling, and of study, as well as a mode of expression. We shall consider the part which the dramatic element plays in the development of the self, for we find upon investigation that the dramatic instinct is a much more fundamental and potent factor in the education of the individual than most people imagine.

How does the child develop and become conscious of himself as an individual? It is not through introspection, analysis, or conscious intellectual valuations, but through the building up of a consciousness of the people and things about him, stimuli to which he responds. Consciousness of other selves precedes consciousness of self. When the young baby cries, there is no consciousness of meaning in the cry, but this consciousness of meaning gradually arises when the mother responds with sympathetic voice and takes measures for the child's relief. After many repetitions of the cry of the baby, followed by the sympathetic voice and comforting ministrations of the mother, the child begins to associate his feeling of relief with the sympathetic tones of the mother which are brought forth by his cry, and a dawning realization

of the consciousness of meaning is arising. The child first builds up a consciousness of the people about him in the social group, the mother, the nurse, for instance, and he becomes, so to speak, the mother and the nurse before he can become cognizant of himself as an individual. His conscious adjustment to other people who act as social stimuli, and his ability to be or to play the other selves, makes individual consciousness possible. The child puts himself into the objects about him and identifies himself with them. He does not play soldier; he is a soldier. Josephine Preston Peabody illustrates this idea in *The Busy Child*:

I have so many things to do,
I don't know when I shall be through.

Today I had to watch the rain
Come sliding down the window pane.

And I was humming all the time
Around my head a kind of rhyme;

And blowing softly on the glass
To see the dimness come and pass.

I built a city on the floor,
And then I went and was a war.

And now I have the boat to mend,
And all our supper to pretend.

I am so busy, every day,
I haven't any time to play.

Stevenson's *The Land of Story Books* also contains an excellent exposition of the play instinct in the child's thought. Through this play activity the child develops self-organization, for when he acts the prince, the soldier, the tradesman, he realizes the difference between himself and these characters, and establishes an appreciation of meaning. Consciousness of meaning grows out of knowledge of the relation between stimulation and response. It is this consciousness of meaning that separates us from the animals, and we become cognizant of meaning through a consciousness of our attitude toward the world of people and things about us. The horse or the cat never plays the part of another self; hence, lacking a consciousness of meaning, they have no true self-consciousness. The child builds up his conscious-

ness of self, his apperceptive reservoir, through this projection of ~~self~~ into external objects. Children are making, and must constantly make, valuations, and thereby set up standards for future activity. And so we see that from the first this dramatic power, this inborn impulse towards imitation and self-expression, is present and active and is ~~the~~ means through which one comes into possession of his individual social consciousness. The extent of this social consciousness depends upon the fullness of one's experience; all phases of education are bound up in the utilization of the dramatic instinct, and in the work of extending individual experience for the purpose of securing the fullest development of the social consciousness.

The child can think only in personal terms, in a dramatic form. You have observed the working of a child-mind, and have seen how the child plays or unconsciously educates himself, creating imaginary companions, carrying on imaginary conversations, and building up a world of his own. This was indicated in the little poem of Josephine Preston Peabody and is well illustrated in many of the poems of Stevenson's *Child's Garden of Verses*, Grahame's *Golden Age*, and other pieces of literature that come readily to one's thought. Children play with imaginary companions, and give personality to inanimate things because they can think only in personal terms. Analyze through introspection your own mental activity, and you will perceive, perhaps to your amazement, that your thinking and even your dreaming nearly always takes the form of a conversation, a dramatic style. Indeed, the process of thinking is in the form of word and reply. All reflective consciousness arises in social environment, and without its stimuli a consciousness of self would not arise, and we should have, doubtless, such an individual as Casper Hauser. Words were originally expressions not of an idea but of an emotion. The act of expressing an idea helps to clarify thinking and vivify and fix the idea; the more complete the expression, the keener and more permanent the idea becomes. (For illumination of this subject, see Colonel Parker's paragraph on "Skill"—*Talks on Pedagogics*, page 228.) Then, to develop the reflective consciousness, one must go through the development of consciously putting oneself in the place of those who make up the social group around one, and legitimate expression, clarification, and direction must be given to the emotion.

Only through introspection can we know ourselves, and it is only through the cognition of other selves, and things in relation to other

selves, that we have the material for introspection. The child is gaining through the imagination the consciousness of meaning and a fund of experiences which result in the building up of his own individuality. The inborn dramatic instinct is always demanding food and seeking an avenue for expression.

I have spoken rather briefly on the psychology of self or individual consciousness to make it clear that the warp and woof of the social self is the dramatic instinct and power; to show that our cognition of life is in proportion to our ability to project ourselves into the objects about us and into the other selves. We build up our concepts through the consciousness of our attitude toward people and things, and our habits of mind and of body are affected by our conscious interpretation of the life of those about us. These concepts are built up through reaction to real or ideal personages; that is, the personages which the great writers have evolved for us, or that our own imaginations have created.

The exercise of dramatic power as a mode of thinking, of study, and of expression is an instinctive recognition and estimate of values, the drama, *per se*, answers to the actual drama going on in the mind of the individual, and the play is the bodying forth, the making concrete, of that which is going on in our own consciousness. That is, the drama and acting do not furnish vicarious experience, but they put concepts and knowledge of life into a sequential whole.

Every individual has a limited and unique environment. He sees life at an angle, and he can gain an appreciation and true estimate of life only when he gets a perspective and sees things in their true relationships. When the dramatic attitude toward life is atrophied, then self-realization and self-progress are arrested. We need, then, to recognize this dramatic instinct, not only in the primary school, but all through the educative process, for the direction and development of the real self grows, broadens, and develops through the weighing and testing of social activities and conditions, and the putting of oneself into another's place. Dramatic experience is a necessary part of the education of every individual, and is not to be reserved for a few specially gifted, any more than music, art, mathematics, or ethics. Every great leader has a largely developed dramatic mind, the result of true dramatic training. "The taproot of selfishness is weakness of imagination. We can sympathize only with what we can picture to ourselves, and the inability to feel for another simply means inability

to grasp by means of the imagination the experiences through which others are passing." (Hudson, in *The Church and the Stage*.) The Golden Rule is the recognition and declaration of true dramatic power as a requisite of complete living and perfect self-development. Jesus was a great leader because he knew through sympathy the problems of his fellow men. His parable sermons were preëminently dramatic.

In an age or in a community where self-will, narrowness of view, and intolerance are predominant, the drama and all arts, of necessity, fall into neglect.

The really great men and women are those in whom the power of sympathy and imagination have been fostered or at least permitted to develop. "The man of imagination lives all lives," says Ingersoll. Through the imagination we get an insight that cannot be obtained in any other way. For example, commentators of Shakespeare often fail to see what actors, through their keen sympathetic imagination, intuitively perceive. Mr. Rolfe and Mr. Hudson have expressed themselves as indebted to some of the great actors for not a few of their best interpretations of Shakespeare's text.

Children are naturally dramatic, emotional, and imaginative, and normal and progressive men and women are too. Then why do the young people in our secondary school sometimes become more or less self-centered—frequently selfish? Is it not partially because their imaginative dramatic nature has been discouraged by their artificial social life and by the somewhat academic and undramatic methods of the secondary schools? Their thoughts have been turned inward and narrowed instead of outward and broadened.

Educators are appreciative of the drama as a potent factor in education. Ex-President Eliot of Harvard has said: "Here is this tremendous power over children and over fathers and mothers that ought to be utilized for their good. It is true that the dramatic instinct is very general, and it can be used to put into the hearts and minds of children and adults all sorts of noble and influential thoughts. That is the use that ought to be made of it. . . . So I say that this power developed in a very striking manner by Miss Alice M. Hertz,* in the Educational Theater, is one that ought to be at least in every school in this country, and, moreover, I believe that it is going to be."

Professor Baker of Harvard, Professor Phelps of Yale, Professor Burton of Minneapolis, and many other leading educators of the day

*Mrs. A. Minnie Hertz-Heniger, New York City.

have been keen in their appreciation of the drama as an educational factor in the development of young people. Jane Addams has asserted that: "The drama epitomizes and puts the incidents of life in sequence; it helps to straighten out the problems that are all around us. When young people enter into the spirit and the action of it, they derive these benefits from the effort. They try to produce not ideas and abstract conceptions, but life itself, as they see it, and they strive to see it clearly when their interests are engaged in reproducing it. The emotions are vivified when spoken by young lips, and the message which a good drama carries is more visual and effective than the spoken exhortations of a teacher or lecturer."

Perhaps enough has been said to convince the reader that a consciousness of meaning grows out of our knowledge of the relation between stimulation and response, that our self-cognizance and the development of the social self depend upon the organization and extent of our social consciousness, and that our ability to exercise fresh choice requires a reasoned situation and a selection in response to stimuli, and to suggest that the dramatic impulse is a potent and primary element in human mind; that it lies at the heart and soul of the development of human power, and consequently demands recognition and development.

The play is but one aspect of this great subject, drama. It is a tremendous power for good when rightly used, and when not legitimately used, a great force for evil. How the innate dramatic tendency and the dramatic mode of developing a consciousness of self is to be best utilized for the richest and fullest development of the social self has not been fully worked out, but we know that as time goes on educators are recognizing more and more the importance of this aspect of education.

Let us now come to the consideration of the use of this dramatic instinct in the primary school. An understanding of children, as well as a knowledge of social psychology, reveals the fact that the dramatic attitude of thought is particularly alert in the early years of a child's education; it is most plastic and receptive, and requires the choicest sort of food, selected with the most discerning appreciation of a child's needs.

Our subject is one of great depth, and within the limits of this article it will be impossible to do more than touch upon some of its aspects. Perhaps the reader is already saying, let us not have this

exposition of theory, but rather practical and helpful suggestions as to what material to use and how to present it. But I have spoken thus much to try to make clear that if one is to utilize his dramatic instinct wisely and for the real growth of the individual, he must study and strive to understand more fully the principles which underlie it. If I can lead the teacher to investigate and appreciate more fully the laws which demand and the principles that underlie the exercise of this dramatic instinct and expression, the teacher will be far better prepared to work out the problem of the application to his own school situation than if I should cite only how we have tried to use these ideas in the work of this or that particular school. We are quite safe when we understand a principle and follow it. Principle never changes, but application must fit the particular need. I wish to offer a warning against the copying of the actual thing done by another and to urge the finding of the purpose and method which produced the successful results.

The first period of development is one in which the child expresses his reactions solely in the form of inarticulate voice and gesture, but this stage is passed when the child enters school and is growing in the power and use of articulate speech. Nevertheless, his expression is largely pantomimic during the kindergarten and first-grade periods.

Although the dramatic instinct vitally touches all of the child's activities, yet it will be necessary to limit our brief discussion to its use in literature.

The work in literature should give the child the complete opportunity for free and full expression of his play instinct. Growth in understanding of people and things gained through observation, experience, and imagination, demands untrammelled expression, because expression is necessary to evolution in skill, to permanency in impression, to a more complete realization, and to the development of judgment and of the social consciousness.

Since our literature is to serve as a part of the stimulation used to bring out the social self, and is to help to expand the social environment out of which reflective consciousness always arises, it is of primary importance that the literature selected shall stand the severest tests as to content, form, and sound ethics.

All our higher intellectual and voluntary habits are affected by our conscious interpretation of the inner life of our fellows, and also by the interpretation of our imaginary companions.

Such a book as Mrs. MacClintock's *The Teaching of Literature in the Elementary Schools* should be a guide to all teachers of the grades. Percival Chubb's *The Teaching of English* should be in the hands of every secondary school English and literature instructor.

I speak of this matter of choice of literature because I find that some of the material used in the schools will not stand the tests, for it is false in psychology, pseudo-sentimental, poorly constructed, unsuitable to the needs or experience of a child, and therefore uneducational.

We shall find our best source of material for selection among the literary products of the early story-tellers, because the self arose in primitive man as it arises in the child. Hamilton Mabie, in his introduction to *Famous Stories Every Child Should Know*, says of the early folk tales which have been told and retold for generations, that they are "records of the free and joyful play of the imagination, opening doors through hard conditions of the spirit, which craves power, freedom, happiness; righting wrongs and redressing injuries; defeating base designs; rewarding patience and virtue; crowning true love with happiness; placing the powers of darkness under the control of man, and making their ministers his servants."

The best in *Mother Goose* makes a splendid beginning for our work, provided we select a version that has not tampered with the beautiful rhythm. Supposing we have selected—

"Jack be nimble
And Jack be quick
And Jack jump over
The candle-stick."

What shall we do with it after the class has heard it once or twice? To be a permanent impression, there must come expression on the part of each child. This early expression when they first play it will be largely physical; that is, pantomimic, and with but little dialogue, either original or taken from the poem. At first they will see only Jack jumping over a candle-stick, but if their natural desire to talk about the poem is given freedom for expression, they will wonder who says "Jack be nimble." Then some one will perhaps say, "Why, it is he father sending Jack off to bed." "Why does he tell him to jump over the candle-stick?" "Because Jack is so sleepy that the father wishes to awaken him, so that he can find his way up-stairs; the father knows that jumping over the candle-stick will arouse Jack." And so in some such conversation the children go on, relating the story to life, and as they play it the little poem takes on a spirit of reality.


One is the father, perhaps reading the evening paper, Jack sits beside his father dozing, the mother is preparing Jack's bed, she calls for Jack. No reply. Then she calls to the father to send Jack up-stairs. The father looks at Jack, sees he is almost asleep, and says:

"Jack be nimble
And Jack be quick
And Jack jump over
The candle-stick."

Now this little poem is given by the one who is playing the father with the ring of reality because it is said with a purpose—he is the father for the time being, he is thinking in personal terms, and only by thinking in personal terms do our ideas evolve and become valuable in our development. Jack rubs his eyes, picks up the candle-stick, and makes his way up-stairs, and his mother puts him to bed. Dramatic expression of some similar nature works out from the children's own free and spontaneous thinking. At first there are a few children who are reticent about actually playing, but this unnatural attitude soon wears away, and they enter freely into the spirit of the thing, and through this play activity I have frequently seen children who for some unfortunate reason had become somewhat limited and irresponsible find their God-given freedom again. As soon as free expression tends to atrophy, progress and development cease. Remove the restraint, and normal growth of the child will continue. We must use the true dramatic expression in our schools if we would have the well-rounded development of the individual.

Children will attend to a thing as long as they get something new from it. This should be borne in mind in teaching, and should determine how much time is to be spent upon a piece of literature. The value of the dramatic study of literature is that through the joy in repeated expression the literature which we have chosen for its inherent values becomes a permanent part of one's experience.

Do not expect the children of the first grade to hold an impersonation. They most frequently do not because they are in a way both actor and audience at the same time. That is, the thrill of pleasure that they experience in the playing of a character often causes them to drop the impersonation to contemplate and to enjoy their own feeling. For example, the act of being the spider that frightens Little Miss Muffet often causes the child to drop his role of spider and laugh. The child has had a new experience and a novel sensation and stops



to interpret and enjoy it. This is a step in the acquirement of the consciousness of meaning and in the gaining of skill.

Let me give one more illustration of the way we may present dramatic material in the first grade. When the leaves begin to fall in the autumn and one has the feeling that the summer is really over and the winter is close at hand, we frequently take up *The Swallow* by Christina Rossetti.

"Fly away, fly away over the sea,
Sun-loving swallow, for summer is done;
Come again, come again, come back to me,
Bringing the summer and bringing the sun."

The season leads naturally to a conversation about the departing summer and the signs of approaching winter. The children talk about the going of the song birds and the reasons for their going. *The Swallow* is again said for the class, and they begin to feel a delightful sense of satisfaction in finding their own images of thought expressed in beautiful form and set in rhythmic verse; for example, "sun-loving swallow" says so fully and satisfactorily the thing which they had imagined and yet had not been able to formulate in words. Presently, several of the class can say the first stanza. Then we play it. Someone wishes to be a swallow. Then someone is invited to go out for an imaginary walk. He sees the swallow perched on a fence rail, all alone in the chilly autumn air, and he says to the swallow:

"Fly away, fly away over the sea,
Sun-loving swallow, for summer is done."

And off flies the swallow. Then perhaps, we have two children out for a walk, and they find the swallow or perhaps two or three swallows. We increase the number in order to make the playing a more far-reaching social experience. This playing of the story is a right way to gain true interest; an excellent way to fix the valuable imagery and the charming poetic form; and it also leads the children to think in personal terms which, as has already been stated, is the only way in which education proceeds. When one has lively images he has the tendency to express his full attitude toward the object, in action and behavior that is fitting. This means greater permanency of the idea than could follow a less vivid image and a less complete response; the group of images that constitute the core of self-consciousness is thereby enlarged.

The first stanza having been vitalized and made a part of the child's experience, we proceed to image the coming of spring, and then

our birds are called back in the words of the poet. One should not be discouraged in the work, for it is about the middle of the year before a marked growth in the power of expression is noticeable. During the first half of the year, the expression is intermittent, incomplete, without much freedom in conversation, and is largely pantomimic. The teacher must be patient and in no way try to force the dramatic expression, but after perhaps three or four months, a decided advance takes place, much freer conversational expression is added to the physical expression.

The teacher's work now, as always, is to make sure that the child has the right stimuli, and to make conditions right for the child's freest and fullest expression of his mental concepts; and also when his ideas have been expressed, to help clarify, vivify, and enrich these concepts through wise discussion, questions, and added opportunities for reexpression of the widening impressions. Let the teacher's suggestions be positive and not negative, constructive and not destructive.

In the early spring, the first graders do the little poem of Christina Rossetti in some such manner as this. One of the children volunteers to call back the swallows. He perhaps goes to one or two of his classmates and asks them to take a walk in the fields with him; they discover signs of spring, and decide it is safe for the birds to come back; then he says,

"Come again, come again, come back to me,
Bringing the summer and bringing the sun."

Now the children, when they play it all, do it in some such typical dialogue of their own fancying as the following:

"It is getting chilly."

"Yes, and the flowers are gone."

"The days are short."

"I hope the little birds have gone south."

"So do I, for they will find the sun warm there."

"Yes, and they will have plenty to eat there."

(*One sees the swallow.*)

"Oh, there is a bird."

"Is it a robin?"

"No, it is a swallow."

"He ought to fly south before winter comes."

"Let's tell him to go."

"Fly away, fly away over the sea,
Sun-loving swallow, for summer is done."

The children are not troubled about stage conventions, the plau

ibility of time and place, but they do suggest frequently the lapse of time, and conversation perhaps continues thus:

"How cold it is."

"The snow is very deep."

(*The delightful flexibility of child imagination is shown in their rapid transition to spring.*)

"Now it is getting warmer."

"There I see some green grass."

"And here is a violet."

"It is time for the swallows to return."

"Come again, come again, come back to me,
Bringing the summer and bringing the sun."

In trying it recently the swallows hidden away in the far south (the dressing room in reality) did not obey the summons. I kept perfectly silent to watch developments, to see how they would adapt themselves to the unexpected situation. The leader began again, even more distinctly and clearly than at first,

"Come again," etc.

His companion joined to make the message more clear to the far-away swallows; but still no swallows appeared. Assuring himself that it was warm enough for the swallows to return, he started a third time, and the class with one accord added their voices and the result was that the appeal was so earnest and insistent that the swallows flew north. I asked them why they had remained south so long, and they said they were afraid it might be still cold in Chicago.

The folk tales selected for the first grade must be simple but yet like all of the literary material used throughout the elementary school, must obey the laws of literary form, and must contain nothing small or questionable in incident or in outcome. Not only is our literature to help interpret the world to the child, give direction, food and an avenue of expression for his emotional concepts, but it is also to serve as an effective introduction into imaginative art, and as the beginning of the formation of an unconscious appreciation for literary perfection.

Therefore, every story must be perfect in form as well as in content. As an illustration in point, let us consider *The Three Billy Goats Gruff*. The structure of this little tale, as given in Dasent's *Popular Tales From the Norse*, is as perfect in its way as that of any of the great novels. First, there is *exposition*; the three Billy Goats Gruff are introduced—then comes the problem; they wish to get to the hillside for food—then arises the *complication*; they must cross the bridge, and an ugly old troll that eats Billy Goats keeps watch

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 "The days are short."
 "I hope the little birds have gone south."
 "So do I, for they will find the sun warm there."
 "Yes, and they will have plenty to eat there."
 (*One sees the swallow.*)
 "Oh, there is a bird."
 "Is it a robin?"
 "No, it is a swallow."
 "He ought to fly south before winter comes."
 "Let's tell him to go."
 "'Fly away, fly away over the sea,
 Sun-loving swallow, for summer is done.'"

The children are not troubled about stage conventions, the **plaus-**

Most of our material for the first grades will be found among the early stories, because those who told them were on a plane with the child's development, and they too were striving to understand themselves and their environment, which was far less complex than ours. We also select largely from this folk material because the primitive people generally told their stories without over-complexity of accident and with the artist's appreciation for the logic of form.

There is, too, a refreshing democratic spirit in the material used in many of these early rhymes and *märchen*. True worth counts more than position, the poor but brave and worthy lad is felt to be no unfitting match for the King's beautiful daughter; labor is dignified—the lassie washes out the shirt of the Prince, and the Queen is entirely at home, cooking in the kitchen. The emotions of most of these old tales are child-like, courage, loyalty to home, justice. Then too, they give personality to the things of the inanimate world, reveal beauty of character, the ugliness of evil, and the certainty of reaping what one sows.

The mere fact that a story is an old folk tale, myth or fable, is not, however, a proof of its suitability. Many of these old stories were told not to children, but to grown-ups; and many of them have not come down to us in their true form. *Little Red Riding Hood* has been distorted and sentimentalized out of all reason and has very few forms at all suitable for children. Not a little of Grimm is unsuitable, and most of Andersen.

Well, then, having learned how and where to find the greater part of our literary material and having gained a knowledge of how to present it vividly and dramatically, we are ready to proceed on our way, always remembering that everything cannot be acted. Our rule should be to use dramatic expression when it helps to bring out the picture and make images clearer.

Our literature and the teaching of reading in the first grade are separate pursuits except that the children are allowed during the middle of the year to have a copy of *Mother Goose* (preferably one not illustrated because illustrations, unless done by a true artist, tend to limit the child's imagination). Then when, through their own volition, they are attracted to it and show a desire to read, we are, of course, glad to have them do so. Teaching children to read is not at all the purpose of teaching literature.—More of this important subject anon!

under the bridge—now comes *rising action*; the Little Billy Goat Gruff, starting to cross the bridge, is challenged, but superiority of wit and intelligence win him safety through the suggestion that his brother will make a larger dinner. The next incident is thus prepared for and thought is directed to it. The second Billy Goat Gruff comes, and is challenged and likewise proves equal to the situation, and thought is again directed to the incident to follow. Then we have the *climax*; the Big Billy Goat Gruff steps onto the bridge and utterly overcomes and destroys the aggressive, stupid old troll. The obstacle being surmounted, we have the *resolution*; and the Gruff family get the food for which they started.

The story is a unit; there is not an incident that does not serve the central idea; cause and effect are perfectly balanced; the arrangement of the incidents is perfect. The problem is suitable to children; the outcome is ethical, for intelligence defeats stupidity and mere physical bulk.

All of our stories must be just as perfect in form as this, because now is our time to give the impressionable child-mind unconscious feeling for true literature. We are engaged in something more than recreation and delightful play when we are telling the class or having them act, for example, *The Old Woman Who Found the Sixpence*, as told by Joseph Jacobs in his *English Fairy Tales*.

A visitor to a class this winter asked why we should spend time on "That little old story that every one knows." An endeavor was made to show that it was because every child *should* know this old accumulative tale, that we were teaching it, and that it is a valuable old tale to have in one's mental possession, because the delightful comedy incidents of it are put together with nice adherence to the same literary principles that Shakespeare obeyed in the making of his best comedies, even to having the turning in the exact center with an equal balance of steps in the ascending and the descending action. The story is a little masterpiece: there is an interesting situation, an attractive atmosphere, movement, humor, repetition, rhythm, and perfect form. I am afraid the visitor did not get the point of view of the instructor, for she asked if these points were explained to the children.

The two vital points to be kept in mind in our selection of our literary materials are: first, requisite suitability to the child's need and capacity; second, requisite literary form.

finger pieces of literature and give the child the best of the little mass-pieces. We might do well to select from some such list as the following: *Briar Rose*, Grimm; *The Little Red Hen*, Jacobs; *The Musicians of Bremen*, Grimm; *Cinderella*, Perrault; *Why the Bear Is Humpy Tailed*, Dasent; *Boots and His Brothers*, Dasent; *Hans in Luck*, Grimm; *Gudbrand on the Hillside*, Dasent; *The Land East o' the Sun and West o' the Moon*, Dasent; *Why the Sea Is Salt*, Dasent; *Little Black Sambo*, Potter; *Just So Stories*, Kipling; the story of Abraham and Ruth from the *Modern Readers' Bible*, *The Children's Stories*, Moulton; *Aladdin and the Wonderful Lamp*, or *The Fisherman and the Genie*, from the *Arabian Nights*.

One would have to select from the list, and play only those stories that lend themselves readily to acting. There is much to be said on the subject of choice of stories and poems, but the discussion belongs largely to another article. We must, however, use great discretion in selecting our version; for example, for *Cinderella* we go to Perrault.

Grimm's ending of the same tale is unsuitable. Grimm has too much blood and horror. The sisters cut their feet to make them go to the slipper. The birds peck out their eyes, and they go through the blind. This severe punishment is unnecessary. Perrault's happy ending with Cinderella forgiving the repentant sisters is much better for children.

I like to use *Boots and His Brothers* for one of the stories that lends itself readily to acting. This wholesome tale of the young lad with the scientific trend of thought second graders particularly like. The story should come from the teacher to the children in the language of Dasent. I heartily believe in the teacher's keeping close to the literary style of the author, for it is not to be expected that the story teller can create as fine a literary expression as that to be found in Dasent. And most of those who have put this and similar literary stories into readers for second graders have so changed the language and sometimes even the incidents that much of their charm and true value is quite gone. Why do we not keep these beautiful stories intact until the children can read them in their classic form? Why should any one, for example, put Defoe's *Robinson Crusoe* into words of one syllable? There is plenty of material that can be used to teach children to read. It is absolutely wrong both to the author and to the reader to adulterate and change the literary form of the great works of art.

Having given the class the story of *Boots and His Brothers*, o waits for the class discussion which naturally follows. Before acti begins, the teacher should make sure that the children have the in dents of the tale well organized in their own minds. Some such qu tions as these will be in order. "What characters shall we need?" They always select the tree as one of the characters.—"Where does t play open?" "What, then, will be the second scene?" The childi soon show much skill in selecting and in organizing the incidents, a when it comes to actual playing, in dividing up the room into suita places for each scene: "This will be the home of the three boy "Here will be the place where Boots finds the ax," "and there 1 King's palace." Now leave the children free to work out and expr their own conception of the part chosen. At first there is a seemi confusion, conversation goes on in the home of the brothers and the palace simultaneously, and the digging of the spade and the chn ping of the ax add to the confusion until we realize that this is inde the melodramatic period of growth. But before long, the desire make the rest of the class see the pictures and get the story, will bri about the subordination of self to the group in a perfectly natural a educational manner. You will begin to note delightful and v pronounced bits of characterization and true suggestive power m frequently manifested than in the first grade. One little fellow w was chosen to be the tree that grows larger at every stroke of an was seen to mount on a stool that stood near, then upon a chair, a finally upon the sand table in order to manifest the rapid growth the tree.

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Fire, so he took his turn and instead of putting his hands in the air, over his head, he crouched slightly and held his hands close down his sides with his fingers constantly moving. When asked what was pictured to us, he replied, "Why, the Fire refusing to burn. You know the Fire said he would not burn the Stick; so you cannot see the flames much." Now here was thinking and imagery that would put any older person to shame. The child was a truly smouldering creature. And here we see clearly in the first years of school the difference between real acting and the harmful artificial method which many mistake for acting. Throughout our school life, we must see to it that acting shall come from an idea that so fills consciousness that it flows into expression. Acting accompanies and grows out of intensified thinking. Conscious, calculated impersonation is not at all the thing we are aiming for, and is not the natural development of the dramatic instinct. The teacher then, must never say, "Do this or that." "Stand thus or so." The teacher's great duty is to help the child to image more and more clearly, feel more and more deeply, and then to make conditions right for expression.

There is no need for properties, for dressing up. It is criminal to stifle the child's fertile power of imagining, by the use of specially selected accessories and costumes. Better no teacher at all than one who fails to understand the needs of the child, and the way in which the dramatic instinct operates.

Just as the child, in Stevenson's *The Land of Story Books*, played with books that he had read, so there are certain poems used in the second grade that the children enjoy playing. First the pupils must get into a receptive mood, have heard the poem, and have talked out it. Then if it is suitable, they are often permitted to play it. Through a sane dramatization the images in the poem will be more vividly impressed upon the children's minds.

Who has seen the wind?
Neither I nor you:
But when the leaves hang trembling,
The wind is passing through.

Who has seen the wind?
Neither you nor I:
But when the trees bow down their heads,
The wind is passing by.

—Christina G. Rossetti.

In using this little poem why not let some child eager to find out if anyone has actually seen the wind, go out of the room and presently come in and put the question to the class, "Who has seen the wind?" Then let the questioner select someone who seems ready to reply in the words of the poet,

"Neither I nor you:
But when the leaves hang trembling,
The wind is passing through."

The leader again asks the question, and someone makes the second reply,

"Neither you nor I:
But when the trees bow down their heads,
The wind is passing by."

This simplest of dramatizing gives vitality and variety to the presentation of the poem.

In using Stevenson's *Where Go the Boats?* after we have reached the point where a fresh motivation seems necessary before the slower children have the entire poem as a part of their mental content, we have sometimes tried the scheme of pretending that we are out looking for a good place for a picnic. The one who says the poem plays that he has come upon the ideal place and, in the words of Stevenson, vividly describes the "dark brown river" with its "trees on either hand," its "green leaves a floating," its "castles of the foam," and so forth.

One day, a little girl who was saying *Windy Nights* by Stevenson, on coming to the place where she tells of the man riding by in the dark and wet, turned and looked toward the board. It was clear to the teacher that the brown board, which oak panelling separates into spaces of about three feet wide by five feet high, suggested a window to the child; the dark brown of the board was to her the darkness without; utilizing the suggestion, we proceeded to play *Windy Nights*. Two chairs were placed by this "window," someone volunteered to be a child going to bed and someone to be the mother, and the children proceeded to work out their own salvation—however, not as the Bible has it, with fear and trembling, but rather with absolute confidence. Usually the only fear and trembling is on the part of the teacher who does not comprehend the mysteries of the child's unfolding, or else has an undue regard for the opinion of some visitor or parent who may be expecting entertainment and may not appreciate the crude indications of true child develop-

e quite exact). What is more splendid practice in reading than this natural desire to find out the answer to some real question that has arisen in the playing of the story, such questions as "For whom did the farmer send, the first day?" or "What did the mother Lark say to her young ones when they told her that the farmer had sent for his relations?" The text is eagerly read over with a real motive so many times that the words become functioned and the incidents of the story are fixed indelibly in thought; we have secured excellent practice in reading as a by-product of the true and joyous study of literature. We are able by this varied use of literature to sustain an interest in a few worth-while stories and avoid the dissipation of power and energy that results from flitting from story to story.

A recent incident impressed anew upon my thought the realization of the extreme sensitiveness of the child mind and the lasting effect made upon it by that which we give it. A group of second graders were asked what we could play for a group of children from another grade, and someone suggested *Little Boy Blue* which they had had in the first grade. We had not happened to mention this little poem for a full year or more, and I had almost forgotten how the children had enjoyed it in their playing. I asked the class how we had played it, and several eagerly replied, "Why, don't you remember, Little Boy Blue was visiting his grandmother in the country and—," and so they went on with every detail. One little lad in the third grade objected to being read to, and it was a long time before his mother was able to discover the reason for the objection. It was found that the sensitive little fellow was afraid she might read something that had a pathetic incident in it. I can well remember how miserable and unhappy I was made when a child, by the story of *Blue Beard*. These are simple illustrations, but they show unmistakably the lasting quality of the child's impressions and make it quite clear that those who attempt to educate the child should be carefully prepared for their sacred trust. Many people think that it does not greatly matter what the child sees or hears; but experience shows that it does greatly matter and that one should choose only the best and most suitable things for them. Why are we so much wiser about our caring for, and feeding, the body and so much less careful and wise about our feeding, and caring for, the mental and spiritual needs?

The Francis W. Parker School makes much of the natural desire on the part of the young people to share with others that which seems

interesting and worth while to them. The preceding volumes of the YEAR BOOK have shown something of the place the daily assembly holds in the social and educational development of the students. The work in story-telling, literature, and dramatic expression give much admirable material which the children are eager to share with the other grades of the school.

Our morning exercises are so frequent and so much a part of our daily life that they have long since come to seem the natural place for sharing that which is of mutual interest, and consequently do not savor of mere entertainment or show. There is no applause; no curtain calls nor other manifestations that turn attention to personality or make the children think that they are doing anything other than to present clearly and adequately their material to the school. Expression becomes a natural thing, and self-consciousness gives place to poise and self-command. Each individual is a part of the group and realizes that

"All are needed by each one; Nothing is fair or good alone."

Since this feeling actuates our assemblies, it is a perfectly legitimate and educational thing for the younger children to present something from their work in literature, it may be the telling or playing of some of the rhymes, fables, or stories that they have heard. In a larger school, discretion would have to be manifested in limiting the size of the audience before which first and second graders should appear, for there must be no straining of voice or undue effort. A school was visited this winter where the little children were spoiling their voices by trying to make themselves heard in a very large auditorium. Radiation of voice to fill a large space is a matter of special, mature knowledge and is the result of skill and practice.

I have said something about the danger of costumes, especially in the work with the younger children. I do not mean to say that even the first grades on such an occasion, let us say, as the acting before the whole school of *Mother Goose*, shall not have such simple costume accessories as may help to make the idea more real: a crown of gold paper for King Cole, an apron for the Pie Man or a bowl and spoon for Little Miss Muffet. Simple articles of dress that shall suggest the character and distinguish the individual part on the occasion of an exercise before the school are allowable. Actual costuming in the first grade is unnecessary because it tends to make the children think about "the outward shows," which Shakespeare says should "be least

themselves," and may serve to make children a trifle dissatisfied when naturally they are happy in the exercise of pure imagination. The play and the development and preservation of the child's dramatic instinct is the thing to be borne in mind.

In the second grade on such an important occasion as the presentation of some little play for a special-day exercise, appropriate simple costumes are permissible. For Hallowe'en, the second grade gave a delightful little folk tale, and the costuming went so far as to putting the little dwarfs into carefully designed and chosen jersey suits of brown with caps to match. The use of scenery is to be avoided for many reasons, of which we shall speak later. Simple curtains of good, unobtrusive color make the best and most pleasing setting for the stage. Footlights are not to be thought of at this stage of the child's development.

It does not seem possible that one should have to speak about this matter of over-costumed and over-staged play for little children, but all over the country there are frequent examples of harmful things done in the name of education.

A performance of *Hänsel and Gretel* will serve to illustrate the bad practice. This performance seemed to have for its keynote entertainment for admiring parents and friends. The costumes were



2. HANSEL AND GRETEL

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During the third and fourth grades, the work in literature will more and more help to develop the power of reading, but this is not its primary purpose, for the child's ability to understand and appreciate is far ahead of his ability to read from the printed page.

The work in the presentation of the literature proceeds much as in the first and second grades. The children should now each year have one of the longer masterpieces of literature, and Defoe's *Robinson Crusoe* is the large unit that seems to fit this period of development. It gives, however, little or no opportunity for acting because of the few characters. In using *Robinson Crusoe*, it is, of course, understood that only the original should be used, the reflective portions being omitted. *The Jungle Book*, Volume I, of Kipling should be a part of the literary material of the third grade, and there are some delightful experiences in the life of Mowgli that the children love to act. Selected tales from *Reynard the Fox*, and *Uncle Remus* naturally develop into active presentation of the stories. Actual dramatization may be used in the third grade to great advantage. This work in dramatization, besides making the literature a vital, permanent, and joyous impression, has many by-products in the way of practice in reading, organization, composition and writing, and there is always the social motive in the desire to act these little plays for the school, or to have them printed in order that the next year's class may have them to read and enjoy.

The following dramatization of a story from *Uncle Remus* will show the result of such an effort on the part of a third grade. The work is the composite effort of the class, guided, but in no way dictated, by the teacher. The class got the material from hearing *Uncle Remus* read; the negro dialect of the original story, which is difficult to read, makes it unwise to try to have the children do any reading for themselves, as is usual when they are dramatizing stories. It is interesting to note that in the telling as well as in the dramatizing of *Uncle Remus*, the children never attempt to keep the dialect, but always put the story into idiomatic English.

BROTHER WOLF COMES TO GRIEF

Characters: Brother Wolf, Brother Rabbit, Mrs. Rabbit, The Little Rabbits.

Scene: The home of Brother Rabbit. Brother Rabbit is standing before the mirror fixing his hair. Mrs. Rabbit sits in a chair knitting. The little Rabbits play about on the floor.

featured, the setting fussy and not beautiful; there were objectionable fairies and angels with impossible costumes. Now the ordinary stage fairies are not the fairies of the child imagination, and angels are almost impossible to represent in any artistic manner. There are many things that must be left to the imagination, and in representing *Hänsel and Gretel* (basing the story preferably on the libretto used in the Humperdinck opera), the whole presentation should be kept simple and suggestive, and with nothing to distract thought. The great value of the play is to the player. It is the sympathetic inner realization of a character in relation to the whole story that makes for good acting. Angels, fairies, golden stairs to heaven, not only are difficult to present, but they serve to make the play ornate, over-complex, in fact, unchildlike.

I have heard teachers object to having their children take part in school plays. Asking why they objected, I have generally found it was because they had had experience with the production of plays that were extraneous and were worked out and presented uneducationally. The plays were not the natural outgrowth of the legitimate literature work of the grade, but were "pretty" plays or cantatas of little intrinsic value; and the time spent for rehearsals and making costumes was naturally a burden. I am glad the teachers do object to this sort of thing for it is not valuable and is not the real development of the dramatic instinct. As has already been said and will be said many times in the course of this article, we must have greater enlightenment on this subject of the evolution and use of the dramatic instinct, and the teachers must have a knowledge of the subject before they can attempt to use it wisely with the children.

The third grade finds the children much more proficient in their reading ability, and in their power to comprehend longer and more complex story units. They have taken a great step forward in fuller and more detailed portrayal of the characters that they impersonate in their acting; this growth is partially due to the fact that they have made rapid advances in their understanding of people and of the world, and have advanced in actual skill because of frequent expression. The children at the end of the third grade should have acquired a large reading vocabulary and a fair mastery of the technique of reading; at the end of the fourth year they should have very fully the power to get the thought readily from the printed page of not too difficult text, and should be able to give thoughts easily, clearly and picturesquely to others.

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Scene: The home of Brother Rabbit. Brother Rabbit is standing before the mirror fixing his hair. Mrs. Rabbit sits in a chair knitting. The little Rabbits play about on the floor.

be constructed. I wish to warn teachers against using the plays which other teachers have worked out with their pupils. These plays are necessarily crude if they are the actual work of the children. Have your class make its own play, for the value lies, not only in the acting, but in the intimate knowledge and appreciation of the piece of literature from which they get their inspiration and material for dramatization. If we do not pass on the paintings and drawings of the pupils for the contemplation and study of others, why should we pass on their efforts at play-making? Unfortunately, the teacher often has too large a part in "doctoring" the efforts of the children, but even then, the fairest results in the way of a play will seldom stand the test of close examination. It is evident that young people, particularly in the grades, are almost without exception unable actually to create a plot for an original play; this requires a real artist.


When a piece of literature is being dramatized in the fourth grade, and the class has advanced through the stage of outlining the scenes, each pupil writes out the dialogue for some scene that he selects. The best of these efforts are read by the writers, and the class selects from the various papers the speeches that they think will best convey the idea of the story to the audience. The power of organization in the fourth graders, provided they have had the proper development of the dramatic instinct in the lower grades, is astonishingly keen. A fourth grade took a fancy to dramatize *The Nose Tree* by the Grimm brothers. They found upon careful study of the text that the scene and time of action changed frequently. The class decided as the result of their own observation and discussion that a large number of scenes are bad for a play because they break the action, cause the audience to lose interest, and the like. They then set about organizing the material of the story with nice care, skill, and appreciation, and the result was a splendid scenario of four scenes.

Scene I. A forest. The three old soldiers receive the three magic gifts from the forest dwarf.

Scene II. In front of the king's palace. The three old soldiers, now dressed like princes, visit the king and the princess. She gets possession of the three magic gifts. The old soldiers separate.

Scene III. A wood. The old soldier discovers the nose tree and its magic power. The little dwarf gives the old soldier an antidote.

Scene IV. In front of the king's palace. The princess buys one of the magic apples from the nose tree. Her nose grows to an unpleasant length. The old soldier, disguised as a doctor, cures her and gets back the three magic gifts.



The first scene will show how the class gave the necessary exposition and overcame the difficulties of a lapse of time, still preserving a sense of probability.

THE NOSE TREE

SCENE I. A FOREST

(Enter three old soldiers.)

First Soldier. Oh, I am so weary.

Second Soldier. So am I.

Third Soldier. We have walked since early morning.

Second Soldier. And are still a long way from home.

First Soldier. I am hungry as well as tired. We have had nothing to eat but the berries we found by the roadside.

Third Soldier. Let's sit down and rest.

Second Soldier. Yes, let us do so. *(They sit.)*

First Soldier. It is hard on old fellows like us to be turned out of the army penniless.

Second Soldier. Yes, after we have served our country so faithfully for many long years.

Third Soldier. I am glad the wars are over, but it will be hard to earn a living.

First Soldier. Especially when there will be so many soldiers looking for work.

(It has been getting darker gradually.)

Second Soldier. Well *(he sighs)*, I suppose we would better start on our way.

Third Soldier. Look how dark it is getting.

Second Soldier. I am afraid we shall not be able to reach any village tonight.

Third Soldier. We shall have to sleep here in the woods.

First Soldier. I don't like the idea of sleeping in this lonely forest. But I guess you are right—we shall have to spend the night here.

Second Soldier. As long as we have no food, we may as well lie down and get some sleep.

Third Soldier. I think so, too. I am terribly weary. Sleep will make us forget how hungry we are. *(They prepare to go to sleep.)*

First Soldier. I wonder if there are not wild animals in these woods.

Third Soldier. It looks as if there might be.

Second Soldier. Sleeping here won't be very safe.

Third Soldier. One of us will have to sit up and watch while the others sleep.

Second Soldier. We can take turns watching.

First Soldier. Yes, a good idea. I will take the first turn.

Second Soldier. All right. Call me when you are tired.

(The second and third soldiers lie down. The first soldier makes a fire.)

First Soldier. It is damp and chilly in the forest when the sun goes

down. This fire will help to keep us warm and at the same time serve to keep any wild animals away. (*He leans against a tree, yawns, and looks anxiously into the gloom.*) It is lonely and dark.

(*A little man in a red jacket appears in the distance among the trees. The soldier starts and rubs his eyes.*)

What is that red thing moving among the shadows? (*The little man of the forest enters.*)

First Soldier. Who's there?

Little Dwarf. The Little Man of the Forest. Who are you?

First Soldier. A friend.

Little Dwarf. What sort of a friend?

First Soldier. An old broken soldier with his two comrades who have nothing left to live on. But come, sit down and warm yourself.

Little Dwarf. I am sorry you have been so unfortunate. I will do what I can for you. Take this and show it to your comrades when they wake. (*He gives the soldier an old cloak.*)

First Soldier. Thank you kindly.

Little Dwarf. Whenever you desire anything, put this cloak over your shoulders, wish, and your wish will immediately come true.

First Soldier. Thank you, my good friend. If that be so, you have made an old soldier happy. May heaven reward you for your kindness. (*Little dwarf bows and walks slowly away.*) I will wake the others and tell them of our good fortune. (*He starts to awaken them; then pauses.*) No, I will wait and show them in the morning. But it is time for the second soldier to take his turn at watching. (*He awakens the second soldier.*) I am your turn to watch now.

Second Soldier. Very well; have you had a safe watch?

First Soldier. Quite safe, thank you. Good night. (*The first soldier goes to sleep.*)

Second Soldier. A gloomy spot this in which to spend a night! I shall be glad when morning comes. (*Little dwarf is seen among the trees.*) Do I see something moving there in the shadow of that oak tree? (*He rubs his eyes.*) My eyes are still heavy with sleep. I certainly see something moving. Who are you?

Little Dwarf. The Little Man of the Forest. At your service!

Second Soldier (to himself). He evidently means no harm to us. (*To the little dwarf*) Come to the fire and warm yourself. I would we had something to offer you to eat, but, alas, we have nothing, for we are only poor discharged soldiers.

Little Dwarf. You shall not go on your way empty-handed tomorrow. So pray accept this purse. Guard it well, for it is a magic purse and will always contain gold. I may not tarry now, so farewell. (*He goes.*)

Second Soldier. Am I dreaming or is this reality? Surely, this purse is real.

Third Soldier. (*He awakes and sits up.*) My nap has refreshed me, so I will take my turn now.

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with success. After the story has been carefully read and studied by the class and they have decided the needed characters, the scenes, and other necessary details, then instead of writing out the play, we let them improvise as they go along. This was recently tried with Grimm's *The Golden Goose* with real profit to the children and great pleasure to the audience. The presentation was most simple in its staging and in its use of properties, and there were no costumes.

In Scene I the door at the back of the stage was supposed to lead to the home of the three brothers, while the front of the stage was the forest. (Having the various parts of the stage represent different places is a natural and an excellent idea in the plays given by the younger children for it tends to preserve simplicity and the unities of action and of time.) The tree which concealed the Golden Goose was a music rack with a brown table cover thrown over it. The hatchet which wounded the two older brothers and with which the younger felled the tree was a six-inch iron hatchet which one of the class had received with a box of candy as a souvenir of Washington's birthday. The lad's luncheon box contained a roll, a tin cup, and an empty bottle. The Golden Goose, a really magnificent bird, was planned and constructed entirely by the children. They made a life-size drawing with a real goose in the park for a model. They then drew a pattern on cardboard, cut the goose from golden-hued flannel, stuffed him, and gave him eyes, and the most realistic of feet. In the second scene at the front of the stage on the left was the veranda of an inn, with a stool and a bench for furniture. The empty back of the stage represented a street.

Yet for all its simplicity, the play was done with the greatest spontaneity, seriousness, and enjoyment. Real acting develops and requires absolute control of one's thinking. It is not sufficient to have thought out and felt a thing beforehand. You must think it and feel it at the moment of speaking. This is a wonderful discipline in the concentration and mastery of thought and emotion.

The whole study of *The Golden Goose* and the presentation of its dramatization was so filled with apparent values at every step that I wish to enumerate some of them. The story was made the children's forever, together with a real appreciation of its structure and its unity. They gained a wonderful respect for an artist's work. This came about in the following way. Some of these children in reading editions which were really adaptations of Grimm's text, found that many

Second Soldier. Very well, if you so desire. (*Aside*) I will save the good news until morning. (*To the third soldier*) Call me if you need me. (*The second soldier prepares to go to sleep. After an interval a faint sound of a horn is heard in the distance.*)

Third Soldier. What is that sound? Listen! (*The sound comes nearer.*) Who is there? (*The little dwarf appears.*)

Little Dwarf. Do not be alarmed. I am only the Little Man of the Forest.

Third Soldier. What can I do for you, Little Man of the Forest? I have not food to share with you. But enjoy our poor fire with me if you will.

Little Dwarf. I cannot tarry here. But before I go I wish to give you this horn. Play upon it, and it always will draw a crowd and make everyone forget his business and come and dance to its beautiful music.

Third Soldier. And you give this wonderful horn to me? Little Man, I would I could repay you, but, alas, I have nothing to give but my gratitude.

Little Dwarf. Use it wisely and I am well repaid. And now farewell.

Third Soldier. I must awake my comrades and share with them my good fortune. (*He rouses them.*) Awake, comrades, and hear what has chanced. (*They awake.*) Here I have a magic horn which gives forth most lovely music; but that is not all, its notes have power to draw after them the crowds of the street and set them dancing.

First Soldier. And where did you get it?

Third Soldier. But now, from a little dwarf in red.

Second Soldier. The Little Man of the Forest! He visited me while I watched and gave me a purse which never lacks of gold.

First Soldier. The same little man visited me and gave me a cloak that one needs only put over his shoulder and wish for anything his heart may desire, and the Little Man says the wish will come true.

Third Soldier. This is a fortunate night for us surely. Tomorrow we will try our gifts and share our good fortunes.

Second Soldier. Let us travel together and see the world and make use of only the magic purse for a while.

First Soldier. Then when we find a spot that suits us and are tired of roving we will try the magic cloak and wish for a home of our own.

First Soldier. Now, comrades, go back to your slumbers and I will stand guard for an hour and then call one of you to take my place.

Second Soldier. Well, so be it. Once more, good night.

Third Soldier. In truth, it has been a good night for three old soldiers. (*The second and third soldiers go to sleep and the first soldier sits silently guard as the curtain slowly closes.*)

The succeeding acts offered even greater difficulties but the dramatization was equally successful. The dramatization which has its keynote improvisation is used sometimes in the fourth grade

with success. After the story has been carefully read and studied by the class and they have decided the needed characters, the scenes, and other necessary details, then instead of writing out the play, we let them improvise as they go along. This was recently tried with Grimm's *The Golden Goose* with real profit to the children and great pleasure to the audience. The presentation was most simple in its staging and in its use of properties, and there were no costumes.

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the children are rapidly enlarging their interests and are beginning to have some real understanding and appreciation of how things relate themselves to the larger wholes. They are capable of more sustained effort, of truer coöperation, and a more coöordinated expression; and are beginning to feel the dawning stir of many emotions. They love action; this love of activity should be directed into helpful channels and the alert sentiments and emotions given wholesome expression that they may sanely help in the process of true self-development.

The great classics that naturally fit these grades offer splendid opportunities for dramatic expression and help to utilize wisely the abounding activity and the innate emotions of this intermediate period of development. *Robin Hood* by Howard Pyle, in the fifth grade; *Sigurd the Volsung* by William Morris, in the sixth; *The Boy's King Arthur*, the text edited by Sidney Lanier, in the seventh.

The children should do fewer and fewer plays as they advance, because they are capable of a much more complete effort. They are in the realistic period and are less satisfied with make-believe; they desire more and more appropriate material equipment in the way of costumes and properties for their plays. This desire must be recognized as a stage of growth, and it must be met and guided, much care being exercised that it shall not be over-indulged, but shall have its logical place in serving as a stepping stone to the suggestive period which is the highest in art development. The occasional working out of a play for presentation before the school will not be over-arduous if there is proper coöperation in the various departments of the school, and if groups of the class are given the portion of work which they are best fitted to do. The study of the costumes, utensils, and so forth, of the times may rightly be a part of the work in history; the designing of the simple costumes may form a real social motive in the art work; the making of the costumes will give much real joy to the members of the sewing class; the construction of benches, bows and spears is the portion of labor for those taking woodwork; such necessities as spear heads, points, helmets and shields, belong to those in the metal classes; special pottery is worked out in the modeling classes; the music department aids with the singing; the physical training department with the dancing, if there is any; and so by careful planning the various departments can make their work fit into the larger social unit. The arts are closely allied, and have a very practical relationship to the child, who is still, fortunately, thoroughly composite and not highly

specialized, like many adults who consequently lack well-rounded development.

There are many shorter pieces of literature meriting the careful study that must be given a piece of literature which is to serve as play material. For example: *Tales from Hawthorne's Wonder Book*, in the fifth grade, *The Bee Man of Orn*, by Frank Stockton, in the seventh, *Rip Van Winkle*, by Washington Irving, in the seventh.

The following arrangement of Hawthorne's *The Paradise of Children* was worked out by the fifth grade of 1910 with the careful supervision and direction of the special teacher of literature.

THE PARADISE OF CHILDREN

Characters: Quicksilver, Epimetheus, Pandora, Troubles, Hope.

Scene: The home of Epimetheus. As the curtain rises Epimetheus and the children are heard singing outside.

Quicksilver (standing beside a huge chest). The world is in its infancy now, but oh! what a good time in which to live! Now everyone is a child and there are no dangers or troubles, and everyone is happy throughout the livelong day. There is no quarreling, no sickness, and no one is ever thirsty or sad. The joyous children of this earth little realize that their happiness depends largely on the fact that they are still ignorant of the contents of this box. Should curiosity lead any one to lift this cover, the world would become a very different sort of place from what it now is in its perfect freedom from all trouble and care. But soft, here comes Epimetheus.

(Epimetheus enters; he notices Quicksilver and hesitates.)

Quicksilver (in a friendly tone). Come in and let me tell you what I am here. I have come from a far country, and although you don't know me yet, I know you, and I have come to ask a great favor of you.

Epimetheus. And what may that favor be?

Quicksilver. This precious box that I have just brought with me. I wish you to keep very safe for me.

Epimetheus. That I will, and gladly, too.

Quicksilver. In return for your kindness, I will send you, very shortly, a little playmate and helpmate. Her name is Pandora. Now I must go. Remember, I shall depend upon you to care for the box until my return.

Epimetheus. You can trust me fully to care for your box. Many thanks for the playmate you have promised.

Quicksilver. Good-by. *(Quicksilver goes out.)*

Epimetheus. Good-by. *(Looking at the box)* I wonder who the stranger can be and why he has brought the box to me. Well, I will take excellent care of it until he shall return. It is truly a beautiful box. How dark and rich the color of the wood is, and so highly polished that I can see my face in it! This side is finely carved. Here are figures of children, playing amid flowers and foliage.

(The door opens, and Pandora enters.)

Pandora. Are you Epimetheus?

Epimetheus. Yes, I am Epimetheus, and I am sure you are Pandora, the playmate and helpmate that was promised me by the stranger.

Pandora. Yes, I am Pandora. *(Perceiving the box)* Oh! What a lovely great box! And pray what have you in it?

Epimetheus. My dear little Pandora, that is a secret, and you must be kind enough not to ask any questions about it. The box was left here to be kept safely, and I do not myself know what it contains.

Pandora. But who gave it to you? And where did it come from?

Epimetheus. That is a secret, too.

Pandora. How provoking!

Epimetheus. Oh come, don't think of it any more. Let us run out of doors, and have a merry time with the other children, or, if you prefer, let us go and gather some ripe figs, and eat them under the trees for our supper. And I know a vine that has the sweetest and juiciest grapes you ever tasted.

Pandora. I am not hungry and I do not care to play. I think I should rather remain here. *(To herself)* I wonder what can be inside that great chest! You might open it, and then we could see for ourselves.

Epimetheus. Pandora, what are you thinking of? *(His face expresses great horror.)*

Pandora. At least you can tell me how it came here.

Epimetheus. It was left just before you came, by a person who looked very smiling and intelligent. He was dressed in an odd kind of cloak, and had on a cap that seemed to be made partly of feathers, so that it looked almost as if it had wings.

Pandora. What sort of a staff had he?

Epimetheus. Oh, the most curious staff you ever saw! It was like two serpents twisting around a stick, and was carved so naturally that I, at first, thought the serpents were alive.

Pandora. I know him. Nobody else has such a staff. It was Quicksilver; and he brought me hither as well as the box. No doubt he intended it for me, and most probably it contains pretty dresses for me to wear, or toys for you and me to play with, or something very nice for both of us to eat!

Epimetheus. Perhaps so, but until Quicksilver comes back and tells us so, we have neither of us any right to lift the lid of the box. Won't you come with me and meet some of my playfellows?

Pandora. No, thank you, I will rest here for a little while.

Epimetheus. Well, since you will not accompany me, I will go out and gather some ripe grapes and bring them to you, and then you shall see how delicious our fruit is.

(Epimetheus goes out.)

Pandora. I do wish he had a little more enterprise. *(She goes close to the box.)* It really is a very handsome box and quaintly ornamented

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on this side, and here, carved on the top, is a face with the oddest mischievous expression. The box most probably contains something very valuable and lovely. I wish Epimetheus would open it.

(The voice of one of the Troubles is heard from the box.)

The Voice. Pandora! Pandora!

Pandora (looking about eagerly). Who can have called me? There is no one here.

The Voice (from the box.) Do not be afraid, Pandora! What harm can there be in opening the box? Never mind that poor simple Epimetheus! You are wiser than he, and have ten times as much spirit. Open the box and see if you do not find something very pretty!

Pandora. Where does the voice come from? I am sure I heard some one speak. Can the voice come from the box? *(She puts her ear close to the box.)* I do not hear anything stirring inside. It must have been my imagination. Oh, how I long to know what is in the box! I am afraid Epimetheus would be much provoked if I should venture to look in. I wonder if the chest is locked? *(She examines it.)* It is not fastened by a lock; merely by this heavy cord which is tied here in this great knot. Why, what a curious knot it is; it has no ends! It must have been a very ingenious person who tied it, but I think I could untie it. I am resolved at least to find the two ends of the cord. I really believe that I begin to see how it was done. Nay, perhaps I could tie it up again after undoing it. There would be no harm in that, surely. Even Epimetheus would not blame me for that. I need not open the box, and should not, of course, without the foolish boy's consent, even if the knot were untied. *(As she works, Epimetheus and his companions are heard singing without. She stops to listen.)* What a beautiful day it is! Perhaps it would be wiser if I were to let this troublesome knot alone and go out to join Epimetheus and his playfellows. *(She glances at the face on the lid of the box.)* That face looks very mischievous. It really seems to be smiling. I wonder if it smiles because I am doing wrong? I have the greatest mind in the world to run away. *(By an accidental twist, the cord untwines itself, and the box is without a fastening.)* This is the strangest thing I ever knew! What will Epimetheus say? And how can I possibly tie it up again? *(She attempts to restore the knot, but in vain.)* It seems to have gone entirely out of my mind. I shall have to let the box remain as it is until Epimetheus comes in. But when he finds the knot untied, he will know that I have done it. How shall I make him believe that I have not looked in the box? I shall never be able to do so. If he is going to suspect me of having looked in the box, I might just as well do it at once.

(There is a murmur of voices from within the box.)

Voices (from the box). Let us out, dear Pandora, pray let us out! We will be such nice pretty playfellows for you. Only let us out!

Pandora. What can it be? Is there something alive in the box? Well—yes—I am resolved to take just one peep—only one peep—and the lid shall be shut down as safely as ever! There cannot possibly be any harm

in just one little peep. (*Epimetheus enters softly with wreath of flowers and some grapes. He sees Pandora with her hand on the lid on the point of opening the box.*)

Epimetheus (*aside*). Since she is resolved to find out the secret, I, too, should like to know what the box contains. (*As Pandora raises the lid the room becomes dark. Thunder is heard. She lifts the lid upright, and there is a sudden rush of winged creatures from the box. The Troubles fill the room, buzzing and darting about, and stinging Epimetheus and Pandora.*)

Epimetheus. Oh, I am stung! I am stung! Naughty Pandora! Why have you opened that wicked box? (*Pandora lets the lid fall and starts up. A Trouble stings her, and she begins to cry with fright and pain. Epimetheus runs and opens the door to let the Troubles escape. When they have all departed, Pandora flings herself on the floor, and with her head resting against the box, cries and sobs. Epimetheus, quite out of sorts, sits sullenly in a corner with his back to Pandora. Suddenly there is a gentle tap on the inside of the lid.*)

Pandora. What can that be? (*Epimetheus does not answer.*) You are very unkind not to speak to me. (*She sobs again. The knock is repeated.*)

Pandora. Who are you? Who are you inside this naughty box?

Voice (*from within—sweet little voice*). Only lift the lid and you shall see.

Pandora. No, no, I have had enough of lifting the lid! You are inside of the box, naughty creature, and there you shall stay! There are plenty of your ugly brothers and sisters already flying around the world. You need never think that I shall be so foolish as to let you out. (*She looks toward Epimetheus, expecting him to commend her for her wisdom.*)

Epimetheus (*mutters*). You are wise too late.

Voice. Ah, you had much better let me out. I am not like those naughty creatures that have stings in their tails. They are no brothers and sisters of mine, as you would see at once, if you were only to get a glimpse of me. Come, come, my pretty Pandora! I am sure you will let me out! (*Pandora is cheered by the pleasant voice. Epimetheus turns half round and seems to be in better spirits.*)

Pandora. My dear Epimetheus, have you heard this little voice?

Epimetheus. Yes, to be sure I have, and what of it?

Pandora. Shall I lift the lid again?

Epimetheus. Just as you please. You have done so much mischief already, that perhaps you may as well do a little more. One other Trouble, in such a swarm as you have set adrift about the world, can make no very great difference.

Pandora. You might speak a little more kindly. (*She wipes her eyes.*)

Voice (*from within the box*). Ah, naughty boy! He knows he is longing to see me. Come, my dear Pandora, lift up the lid. I am in a great hurry to comfort you. Only let me have some fresh air, and you shall soon see matters are not quite so dismal as you think them.

Pandora. Epimetheus, come what may, I am resolved to open the box.

Epimetheus. And, as the lid seems very heavy, I will help you! (*He runs across the room and lifts the lid. The room becomes light again. Hope, a sunny and smiling little personage, comes forth. She flees to Epimetheus and lays the least touch of her finger on the inflamed spot where the Trouble stung, and immediately the anguish of it is gone. She kisses Pandora on the forehead, and the hurt is cured.*)

Pandora. Pray, who are you, beautiful creature?

Hope. I am to be called Hope. And because I am such a cheery little body, I was packed into the box to make amends to the human race for that swarm of ugly Troubles, which was destined to be let loose among them. Your one wrong act of opening the lid of the box entrusted to your care by Quicksilver has brought calamity to the whole world.

Pandora. I am very, very sorry.

Hope. Sorrows, diseases, cares, and many kinds of naughtiness have gone forth to affect mankind and to bring many tears and heartaches where formerly existed only joy and happiness. The flowers which have never been known to fade will now begin to droop and shed their petals in a day or two, and the children who seemed immortal will grow older and older day by day, and become youths and maidens, men and women.

Pandora (sobbing). Oh, I am indeed sorry! My wrong act has brought pain not only to myself but to all the world.

Epimetheus. It is largely my fault, for I should have prevented you from lifting the lid. My curiosity made me false to my promise. (*He seems quite repentant.*)

Hope. Never fear, we shall do pretty well in spite of them all.

Pandora (drying her tears). Your wings are colored like the rainbow. How very beautiful!

Hope. Yes, they are like the rainbow, because, glad as my nature is, I am partly made of tears as well as smiles.

Epimetheus. And will you stay with us forever and ever?

Hope. As long as you need me—and that will be as long as you live in the world—I promise never to desert you. There may come times and seasons now and then, when you will think that I have utterly vanished. But again, and again, and again, when perhaps you least dream of it, you will see the glimmer of my wings on the ceiling of your cottage. Yes, my dear children, and I know something very good and beautiful that is to be given you hereafter!

Pandora. Oh tell us—tell us what it is!

Epimetheus. Yes, tell us what it is!

Hope (putting her finger on her rosy mouth). Do not ask me. But do not despair, even if it should never happen while you live on this earth. Trust in my promise, for it is true.

Epimetheus. We do trust you.

Pandora. For you bring us hope and joy again.

(*Curtain*)

The stage as arranged for the performances was very attractive. Curtains of soft gray-green formed the background. A large chest stood at the left of the stage, one end partially concealed by the curtains; this end was open, and the Troubles were able to get into the chest without being seen by the audience. The chest was decorated in panels by members of the art department to suggest a richly carved and ornamented box. Careful search was made through the work of the artists and illustrators to get the best ideas for the chest. At the right of the stage was a single beautiful Greek bench. The simple costumes were thought out with care to insure beauty of line and harmony of color.

There were two casts in order to give a larger number an opportunity to participate, and the play was given several times that the children might have the value of more than one performance before an audience.

It is always wise to have more than a single performance. When one has had the actual experience of trying to impersonate a character and picture a situation before an audience then he is ready and able to take a step further, to penetrate deeper into the more subtle mysteries of the character and the play. The very act of expression clarifies the situation and sends one back to the literary text of the play for a fuller knowledge of the character, and with the second playing comes growth of skill and a deepening grasp of the individual part in its relation to the whole play.

Plays in the elementary school should be simple in nature, uplifting in thought, dealing with situations and emotions suitable for the wholesome contemplation of children. The play should grow naturally out of the work of the grade, and not be an exotic growth. The literary literature that should be put into dramatic form is that which will gain in effectiveness by dramatization and by acting. The simple epic or heroic stories best meet the needs of the elementary school. Complexity of plots, sub-plots, an over-abundance of incidents should be carefully avoided. The unities of time, place, and action, should be adhered to as much as possible.

Many of the plays prepared by or for the elementary schools violate the principles of unity. I find half-hour plays divided into three or four acts, with two or three scenes each. This is bad art and disconcerting to the participants as well as to the audience. The dramatization should serve as a training in judgment and discrimina-

tion and give the children an unconscious feeling for proportion and play structure. Keen suspense should not be a great factor in school plays, especially in the lower grades. The audience should early be let into the secret. Children should not be permitted to incorporate into a play any and all dramatic material they may have at hand. Such a procedure would be most deleterious, and in extremely bad taste. Every play must have a vitalizing central idea, and every part, every incident, every character must logically serve this dominating central idea. Imagine an artist saying, "Now I will throw off all restraint, and on this canvas I will put all the charming picturesque bits that I have observed of late." Would the result be a picture? Would it be art? No, rather a "vaudevillistic hodgepodge." And yet we see plays injured by the introduction of alien material. I remember a Greek play in which there were Dutch dances. Our standard is education, and not entertainment. The drama is one of the fine arts and **must** be so taught. A good play, then, must have a clearly defined and worthy purpose, a clash of forces, a sane sequence, an inevitable issue, and an artistic and literary form.

There are available for the first seven grades **practically** no plays of sufficient literary merit to justify their use. It is a **great** mistake to give the children plays that are over-mature for **them**, and it is not wise to break the unity of a literary masterpiece by taking out a scene. Children are long-suffering, and an **enthusiastic** teacher can make them interested in almost any story, but this **is not** a proof that it is good for them. There is an abundance of real literature suited to their needs and abilities without discounting **the** future. The use of Milton's *Comus* or Shakespeare's plays, **before** the eighth grade at least, is a grave mistake of judgment.

When the eighth grade is **reached**, we find a few literary dramas that will meet the needs of **the** students, who are now in the adolescent period and are outgrowing **their** complete satisfaction in the simple epic heroes of the preceding **grades**; they show a fast-maturing interest in the real and more **complex** problems of actual life. *A Pot of Broth* by Yeats, *The Nativity* by Douglas Hyde, with the cutting of two or three sentences, Shakespeare's *Julius Caesar*, for example, are plays which the children **can** understand and will take great pleasure in presenting. Such **plays** as *The Merchant of Venice*, *Macbeth*, *As You Like It*, are **too** mature in content and should be left to the high-school period when the pupils are older and better able to understand and appreciate.

At this time, no definite action or stage business need be given them, for the main purpose of this first rehearsal is to leave the actors free to express as fully as they are able their conception of the part they are playing. At a second rehearsal the main arrangement of movement and of business may be made clear. The minor details of action will come from them individually as they grow in activity of thought.

The selection of the players is a difficult problem to most teachers. It is possible, by having more than one cast, to give in our school, where the group is never larger than twenty-four, each member of the class an opportunity to act. This is the ideal condition, for every child is innately dramatic, and needs this development, and two casts give the children an opportunity to see at rehearsals the needs as well as the excellencies in the work of those doing the same part that they are to portray.

The teacher conducting the class should have the actual choosing of the players. The "try-out" system with the other teachers and pupils as judges is a great educational mistake. Only the person who thoroughly knows the children, their needs and their latent capacity, can make a wise selection. The outwardly clever pupils who impress the listener unskilled in the pedagogy of acting, are often those who should not be chosen for a leading part. We need to remind ourselves frequently that the purpose of drama in the school is education. The matter of the selection of the players is of the greatest importance and requires much experience. Oftentimes, the person who at first seemed most unpromising has done the best work and gained the greatest personal growth.

The members of the class are always asked what part they would like best to play, and in the high school they are frequently asked to make out a list of what they think would be the best casting of the parts. While this information will doubtless aid in the selection of the players, yet the final decision must be left to the wise choice of the teacher. This choice will depend largely upon the pupil's intellectual power to conceive the part, his need for playing it, and somewhat upon a fair physical fitness for portraying the character.

The players should never be allowed to memorize their part or even read aloud frequently by themselves until they have a clear understanding of the thought. False emphasis and mechanical reading of lines are often due to the teacher's allowing the pupil to get the words before he has secured the thought. The mis-reading of a line quickly becomes a habit which is more or less difficult to get rid of.

and with each class. But the general statement of method of procedure is the same and the principles laid down for the preparing of *The Nativity* will apply equally well to high-school plays. This first reading should be as vividly dramatic as possible, so that the imagination of the pupils may be stirred and their first impression be a deep and lasting one. It is needless to say that the teacher must do much work preparatory to the reading of the play before the class; the scenes must be visualized, the characters understood even to the point of actually hearing the tones of their voices and of seeing their movements. Every teacher of literature should be able to read with real dramatic power.

The reading of the play to the class is naturally followed by a general discussion of the story and of the characters. This discussion should not go far the first day, and the recitation period should close with the class enthusiastic over the play as a whole.

At the next meeting, the pupils are given texts of the play and each one reads a part. Questions arise in the minds of the pupils and other pupils answer them. The questions and discussion lead to a detailed study of the text in order to prove and illuminate the point under discussion. There is no difficulty in arousing the desire on the part of the pupils to present the play before the school.

When the class has a fair understanding of the whole play and a certain amount of freedom in reading the text, then we are ready to try the play in action. The teacher must have a very clear mental image of the general setting, movement, and business of the play before the children are allowed to act. I always strive, in my preparatory work, to catch the dominating spirit of the drama and devise the setting and furnishings to carry out in line, color, and arrangement this keynote. I use in working out every play, a miniature stage set with furniture of proportionate size, and inanimate players which I move about as I read the play through. In this way, I get a fairly definite idea of effective arrangement and artistic grouping. I make careful note of all that I work out, so that when it comes to actual rehearsals the pupils' minds may not be distracted by the planning of stage arrangement, which is a problem too complex for them to evolve. It is valuable for them to give expression to their conception of the scenes and their arrangement, but the real work of planning the larger movement and arrangement of the play belongs to the director. At the first informal acting it is sufficient to set the stage so as to give a fairly clear image to the actors of entrances, and of the placement of things.

Do not attempt to show the players how to do a thing, for the result will usually be artificiality. Never teach formal gesture. Real gesture proceeds from an active desire to act, and the individual is and would be largely unconscious of the physical movement. Gesture to be true and effective must be spontaneous. Bodily expression and stage business will develop naturally as the players become more and more identified with their characters, and with each unconscious expression in their effort to portray will come a growth in skill. There is always a period when the results seem crude, most inadequate, and uncorrelated; this is when the director must have faith, born of the knowledge that this is a step in the process and he must wisely refrain from doing the part for them to copy. The true development of the dramatic instinct is from within the individual. Clarify the player's thinking and lead him on but do not "coach" him. Before long the actors will emerge into a period of realism, and from that stage of development, the artist can lead some of the players to enter the first stages of the suggestive realm which is the highest in art.

Sometimes it is helpful to make the players do a part of a scene in pantomime; being deprived of reliance upon mere words, which have become so predominating a factor in the transference of thought, the players of necessity have to rely wholly upon bodily expression, and this helps to free the more or less unresponsive physical agents.

About twenty-five rehearsals are necessary to get a play into really good condition for serious worthy presentation. Some one in a recent educational journal told of getting an elaborate production ready in a week, and gave as a reason for so doing that a longer preparation would cause the children to become weary of the work. I have never found that adequate preparation had this effect. If the play we are preparing is worth while, and we have determined to do it for an audience, then it is deserving the best production that the children can give. One must learn to respect art, and hasty and imperfect work is conducive to low ideals and bad habits of thought and behavior. The work will always be interesting provided the children are constantly growing in insight and in the power of expression. We need intensive work and extensiveness as far as the children are capable of doing at that period in their development. The feeling that they have done their best and have given a truly excellent presentation will be an unending source of joy and satisfaction to them.

I have spoken in another place of the value of more than one

presentation of a play. The auditorium in which the pupils produce their dramas should be intimate because the young people have immature voices and are unskilled in the art of radiating and projecting thought to fill a large hall. The performances should be short because young amateur actors cannot build up and sustain a long sequence of incidents.

Really fine copies of the pictures done by the great artists were frequently referred to in the work of designing the costumes of the *Nativity Play*, in arranging the stage, and in evolving effective grouping of characters. The children often were seen studying *The Star of Bethlehem* by Burne-Jones. They were deeply impressed by the way in which the kings expressed in every attitude their wonder and reverence. The shepherds in Larolle's picture made those playing the part of shepherds wish to express awe and humility just as fully. By observing another cast practicing, the children perceived that those who at the moment of speaking a line felt most deeply and sincerely the thing they were saying came nearest to having the whole body talk as was true in the pictures by the great artists.

The matter of designing and making of the costumes for *The Nativity*, was discussed in Volume I of the YEAR BOOK.

The problem of stage setting is always freely talked over by the class, for it is their presentation of the play, but young people are so filled with our modern realistic methods of production that they need to be educated and directed in the subject of good taste in the matter.

It will often take considerable wisdom and tact to get the young people to feel satisfied with the idea of a sane artistic setting. One class was unanimous in its desire for a realistic stable with large wooden doors opening toward the audience. Realizing that a person convinced against his will keeps a tenacious hold of his opinion, I, like Polonius, "went round to work." I said "Very well, let us consider how we can carry out your plans." We looked at our stage and the class found that it was in truth extremely small. I asked them to indicate on the floor with chalk where the stable would stand, and where the doors would swing when opened by Joseph. Someone soon said after due consideration, "Oh, we cannot have doors swinging out because the shepherds and kings would be in the way." All agreed that our stage was too small for swinging doors and actors at the same time. Sliding doors were found to be impracticable even if they were really in use at the time of *The Nativity*. The final stage setting

out of the adaptation of the material to the space, was wonderfully beautiful and suggestive, and moreover was a great satisfaction to the persons who gained through it an education in taste. The stage was lit with soft gray-green curtains which made a far more pleasing background than could have been obtained by an attempted realistic landscape which would have failed to harmonize with the spirit of the play. The idea of the stable was indicated by two upright logs of about twelve inches in diameter which supported a similar horizontal



3. THE NATIVITY

5. The silver-gray tones of these weathered logs blended beautifully with the gray-green of the stage hangings. There were no realistic stable doors, merely curtains of the same material as the background. These curtains opened in the middle and could be pushed back out of sight. The interior of the stable was most simple. On a platform raised some seven inches so that all might see, was a rude manger; at the left stood a simple bench on which Mary sat. Joseph stood at the right, and just over Mary's head hung an old lantern. The placement of the manger, bench and lantern were nicely calculated so that Joseph at the head of the manger and Mary seated at the foot, made a lovely balance of line and space.

The lighting I worked out with great care. Carefully distributed

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the contemplation of children, and even when a play appropriate for young people is given, I believe it is wiser to keep the younger children away. The large theater, the crowds of people, brilliant lights, music, laboration of staging, ornateness of costume, and the excitement of the acting, are over-stimulating for young children.

The moving picture houses are surely no place for children, and yet thousands under the age of eleven are going daily with the consent of their parents. They see picture plays of things that never could or should happen. These young children in the formative period of growth, who are gaining a knowledge of things that shall serve to interpret the world to them and form their criteria for action, are given by the average moving-picture show ideas and standards of conduct that are false and baneful. Children need emotional development, not not thrills and nervous excitement.

The school must help largely to handle the problem. The child's need for the expression and direction of his dramatic instinct and his desire for seeing human nature portrayed in play form, must be met by simple, artistic presentation in the school auditorium of plays whose content is suitable to the child's stage of development. After the age of eleven, there can safely be an occasional visit to a good play well acted, but these visits for elementary school children should be few and far between, and the plays chosen with greatest wisdom. Between the age of eleven and the time when a child reaches the high school, an artistic, properly arranged and well-equipped school auditorium should meet nearly every need for dramatic expression, and for the witnessing of plays. The average moving-picture house is no place for any young person, for it is very like the first page of a sensational and sentimental newspaper and is productive of about as much harm.

The high schools have in a large measure failed to recognize and wisely use the dramatic instinct of the pupils. Almost the only attempt in many high schools is through the dramatic club, but this club which is to be found in most high schools, does not meet the need in any satisfactory way. The membership of these clubs is limited, and so everyone in the school does not get the needed opportunity for the development of his dramatic nature. The work of these dramatic organizations is not infrequently of a low standard. There may be an occasional presentation of a worthy drama but more often the energy is spent on the preparing and giving of some musical comedy or trivial farce. This sort of work has no merit as education. Even the value

concealed blue light gave the appearance of early morning to the portion of the stage in front of the stable. When Joseph drew the curtain at the stable entrance to reveal the mother and child to the kings and shepherds, one saw that a brilliant light came from the manger and illuminated the portion of Mary's face that was turned toward the child. This idea of having the illumination emanate from the face of the Christ Child was suggested to me by Correggio's *Holy Night*. A chiaroscuro effect was gained by the dim light from the old lantern that hung to the left of Mary and cast wonderful shadows. The idea of having the whole picture dominated by a central high light was the



4. THE NATIVITY

result of a long period of observation of the methods of lighting used at the Royal Opera House in Dresden. A play appeals to the eye as well as to the ear; therefore simple artistic effects are always appropriate, provided they help to make the play more clear in its idea and spirit.

Let us say a few words, before passing from this brief consideration of the use of the dramatic instinct in the elementary school, about the problem of the playgoing of young people. Children demand and will have an avenue for the expression of dramatic instinct and the innate love of play, and they also sincerely desire to see stories presented in actual dramatic form. The theater, however, is no place for children, under the age, let us say of eleven. Seldom does the commercial theater present a play the content of which is at all suitable

the contemplation of children, and even when a play appropriate for young people is given, I believe it is wiser to keep the younger children away. The large theater, the crowds of people, brilliant lights, music, laboration of staging, ornateness of costume, and the excitement of the acting, are over-stimulating for young children.

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to be derived by the few in the giving of the occasional good drama is lessened by the uneducational manner of its study, preparation, and presentation.

Legitimate dramatic expression in the high school as in the grades is indissolubly connected with the study in literature, and is the natural outgrowth of this study. Literature has been too frequently taught as if its main purpose were the training in English or philology.

Every educator should realize that literature is essentially dramatic in essence and should be treated in a true dramatic spirit. Literature cannot be truly appreciated when it is studied in a purely selfish and self-centered way. To make a beautiful piece of literature one's own, it is necessary, not only to be moved by it, but it is imperative that one should strive to make others feel what he feels; every impression to become permanent and valuable must have a motor expression.

I once heard Dr. Richard G. Moulton say: "In most subjects, all you need is facts. Facts are the most barren things in literature. The emotional nature must be aroused or you are outside literature, the soul must be stirred to love or to hate."

In literature we have the expression of that which is finest, noblest in human thought and endeavor. A sympathetic appreciation of literature and a desire and effort to make others feel what we feel is a great educational force.

A worth-while acquaintance with literature demands that its study be dramatic in spirit and that the individual be moved to give some expression to the thought received, for the effort to make others see and feel enhances one's own perception of truth and beauty. An idea is thwarted, if it is not allowed to bud and blossom according to the law of its nature. I do not mean to suggest that every piece of literature should be dramatized, or that every drama is to be acted; this would be the height of folly. I do mean to say that imaginative literature should be approached in a dramatic frame of mind and that it should be given vocal expression.

The drama itself is one of the fine arts and as such deserves our serious recognition and attention. Most drama was of course written with the idea that it should be acted. It is not necessary that all the drama we study should be acted in costume, and before an audience, but at least we should have an impromptu acting before the class of a portion of each drama. Every student some time during the four years of the high school, should participate in the thorough preparation and



5. AS YOU LIKE IT



6. AS YOU LIKE IT

presentation before an audience of at least one really worthy play. A careful study and performance of one of Shakespeare's plays does more to make the students understand and love Shakespeare's art, and to give them a real feeling for true drama, than months of less interesting silent study and analysis of the text. We think we know through mere intellectual perception what we feel, but we cannot fully know until we have given our emotions expression. Each expression fills us with a consciousness that all is not expressed, and this leads us to further acts of expression which tend to clarify, deepen, and fix the ideas and emotions. Thus the body becomes a more responsive agent of thought, and the mind becomes capable of clearer thinking and of deeper feeling.

We cannot reasonably question the place of the drama as a form of expression and the value of the use of the dramatic instinct as one mode of gaining an understanding of the world and of self. Macready, the great actor, said that the art of acting is "to fathom the depths of character, to trace latent motives, to feel their finest quiverings of emotion, to comprehend the thoughts that are hidden under words, and thus possess one's self of the actual mind of the individual man."

The art of acting requires keen sympathy, a wide experience, and a fine intelligence, for to present a person thinking aloud is a most difficult achievement. In the beginning of this article, I tried to make it clear that social and genetic psychology have demonstrated that we come to a realization of the socially efficient self through a process that is essentially dramatic. There are many ways in which in the high school period, we can feed this dramatic instinct. But literature perhaps gives us our best opportunity. Without some sort of dramatic expression to give force, life, and true being to one's ideas, these ideas remain for most people, mere airy abstractions. How permanent and vivid an impression have you of the details of the great dramas and novels you read five or ten years ago? Those masterpieces of literature which stirred your imagination deepest have left the most lasting imprint. But if you have had the good fortune and joy actually to act a great play you will realize how potently and subtly it has become a part of you. The general impression which one gets from the first or even second reading of a drama is very different from the deep, intimate, permanent knowledge and emotional experience which belong to one who has given a sympathetic interpretation to a character in that great drama.



7. AS YOU LIKE IT



8. AS YOU LIKE IT

If the instructor understands the manifestation of the dramatic instinct, and knows how to direct it and use it in its true association to the study of literature, then many advantages will accrue to the individual. We have proved through several years of practice that the following are some of the values which are sure to accompany the legitimate use of dramatic expression.

The development of a social consciousness may be illustrated by the preparation and giving of Zangwill's *The Melting Pot*. The graduating class of 1908 chose this play because it expressed their conception of true brotherhood; and throughout the long period of preparation, the spirit of citizenship was uppermost in their minds, and a lasting lesson was brought home to them in such a forcible way that its essence can never be wholly lost. The composite nature of a play leads through its active rehearsal and presentation, to a careful adjustment of the individuals to each other. The exercise of the spirit of *subordination of self to the group* for the unity and good of the whole social body is a valuable training for life and is another aspect of the development of a social consciousness.

The stimulation of human sympathy is another product of the development of the dramatic spirit. The act of striving to appreciate another's point of view and understand his problems in order that we may justly present that person in thought, speech, and action tends to widen one's own mental horizon and enlarge one's sympathies in the problems of others. This leads to a deeper insight into hidden depths of human action and develops *insight into character*.

The adolescent, no less than the child, wishes for a fuller experience of the manifold phases of human life. Young people yearn to share the activities and emotions of those who live outside their own limited environment. The utilization of the dramatic feeling helps to bring about one avenue for the wholesome *multiplication of personalities*.

Dramatic art gives a right exercise and direction to the emotional nature through *the cultivation of the imagination*. Through the exercise of imagination in acting, we can get a certain type of emotional experience that we need and that does not come to us in our own experience. One reason why some people are led to indulge in stimulants is because of the monotony of their lives, resulting from a limited environment and from a lack of the legitimate imaginative and emotional experience which is necessary to the harmony and balance of



9. THE SERVANT IN THE HOUSE



10. THE SERVANT IN THE HOUSE



11. THE SERVANT IN THE HOUSE



12. THE SERVANT IN THE HOUSE

every one. When the imaginative and emotional desire is not satisfied in a natural way, it tries to gain it through artificial means. The poor children who are invited to witness the acting of more fortunate children have often said most plaintively, "Oh, if I could only take part in a real play!"

Training in moral judgment cannot fail to result from the seeing of life whole as we do in a sound drama. Every-day experience gives us little perspective; we cannot see the inevitable way in which cause and effect are connected. The drama gives us a lookout, so that we can

understand human experience and see the results of human conduct, thereby gaining an understanding of life. This *helps to establish moral ideals*.

The work of preparing and presenting a play gives splendid opportunities for the exercise of initiative. The following illustration shows how great this initiative is and how well able the young people are to assume large responsibility. A group of high-school students, when an accident deprived them of the presence of their director, carried through successfully the complicated presentation of a performance of Shakespeare's *As You Like It*. It was the first time this particular cast had acted the play, and they had never had an opportunity to rehearse on the stage where the performance was given.

The development of concentration has been mentioned frequently. The successful portrayal of a character before an audience necessitates that the speaker feel the emotion while he speaks. This requires a high degree of concentration. In many arts one can go back and try things over if he does not feel satisfied with the results of his first expression; or he can wait until he is in the mood for his work. But in acting, the audience is at hand, and one must do the best he can then and there, and he has only his voice and bodily expression to rely upon. The actor's medium for expression is much less material and far more mental than that of any other art except singing.

One is able in a large measure, under the cover of playing the part of another, to succeed in the *overcoming of self-consciousness*. A fine art, to be appreciated, needs to be understood in all its aspects and through actual experience. The work in dramatic expression, when carried on as it should be, helps to give young people a *realization of the power and place of the theater*. Staging, costuming, and lighting are subjects to which some of the foremost modern artists are giving much careful study and experimentation. Through the work of dramatics in the secondary schools, the young people should gain some little insight into this art movement. The commercial stage gives what the public wants, and to raise the tone of the stage you must raise the ideals of the playgoing public. Our young people who are to make up the audiences of the future, should be led to recognize the true scope and place of the drama and of the theater.

Dramatization certainly helps in *the cultivation of literary feeling and power*. The anticipation of presentation which actuates the pupils in the making of a play results in much enthusiasm. The actual work

of dramatization, therefore, reaches a higher mark of excellence than is to be obtained in composition work that has a less compelling social motive. Writing of real vigor and power is developed, and the constant reference to the piece of literature that is being made into a play, together with the study of the work of a great dramatist, to find out how he has constructed his play, helps to create a real literary appreciation and feeling.

The acquisition of information is one of the minor accompaniments of the work. The intelligent giving of an historical play, for example, necessitates not a little acquaintance with the habit and customs of the period.

A very practical result is *the training of the memory*. Therefore, the plays given ought to be worth while, for it is a pity to fill the thought with material that has no literary value.

Improvement in speech follows the work in acting, if properly conducted. The bettering of the speech of most Americans is a "consummation devoutly to be wished." I know of no time when young people are so willing to work to improve speech and overcome defects as when they actually find that bad habits of voice production are hampering them in expressing themselves and in getting their thought "over the footlights." Pupils are at such times ready to strive patiently to overcome weakness of voice, throatiness, bad articulation, poor enunciation, and the inability to radiate. Voice exercises are now not a bore, but an avenue to desired freedom and beauty of expression.

Acting helps to give bodily control and freedom.

These are some of the values that follow the legitimate and true use of the dramatic instinct which is innate in every one. The great good that comes from a thing rightly used implies that it is most dangerous when wrongly directed and misused. So it is with the drama, but this danger from wrong use does not signify that we should abandon it, but rather bids us to be more careful to use it well. Fire keeps us warm and cooks our food when rightly used, when not kept under control and direction it burns our homes and destroys life.

Let us consider some of the pitfalls which have been ascribed to work in dramatic expression and suggest how they may be avoided.

It has been said that dramatic study is apt to make one disinclined for less interesting work. Well, this is not the fault of the drama, and it should not be condemned because it is a pleasant study. The old idea that because a thing is delightful it must be baneful has long since

given way to the belief that work that is worth while brings abundant joy and satisfaction.

Dramatic study when educationally and artistically pursued is not "the primrose path of dalliance" but means hard, conscientious, unselfish work.

Excellence is attained only by arduous labor, unswerving purpose, and unfailing discipline. Experience has proved that the legitimate and right use of dramatic study does not make one disinclined for other work; rather it makes one feel the necessity and value of other forms of study, and realize that success in art depends upon a well-rounded body of knowledge, freedom of physical expression, and a large efficiency.

(Here is a simple example of how this subject relates to the more technical work. On one occasion when a pupil in the seventh grade read very poorly because of a failure to recognize the logic of the thought, I asked the class about the grammatical construction of the sentence, and we analyzed it into subject, predicate and modifiers. It was soon patent to the class that this technical knowledge was indispensable before the power to read well could be acquired. Just a few days before, some of the children had been asking what real value grammar study had. They received a very practical answer.)

Over-stimulation of emotion is frequently mentioned as a pitfall. Here is a real danger, and it must be guarded against as carefully as the teacher of physical culture, in his effort to develop the muscles of the students, has to guard against over-taxing and straining them. The study of expression should stimulate and develop the higher and nobler emotions and should bring under control the baser feelings. Over-stimulation can and must be carefully avoided.

Over-training is a danger. How far should the teacher go in the matter of training? What is the norm which determines this? Some people claim that there should be no training; "let the child feel the emotion and then express it and leave it." To me, this is to stop far short of the educational goal and would, I believe, be a failure to promote the child's growth and would lead to a more or less selfish and purposeless indulgence of emotional feeling. The student, having perceived something of the truth, beauty and emotional content of a piece of literature, feels the desire to express that which he has perceived. When this necessary expression has been made, the pupil is sensible of its inadequacy, due partially to lack of physical freedom and flexibility,

and partially to a meager grasp of the thing to be expressed. The pupil should then go back to the piece of literature to gain inspiration and truth and should again give expression to the truth perceived. How many times may the process be repeated? Until the student has come up to some mature ideal held in the teacher's mind? No, this is assuredly not the criterion, but the process should be repeated until the pupil has done the *very best* that he is *capable of at the time*. Unless this goal is held, art study tends to become a form of pleasant indulgence rather than a factor in the education and development of self. It requires sane judgment on the teacher's part to recognize when the pupil has come up to the best he is capable of at the time. The student must not be allowed to imitate the teacher. Artificial imitation is not education; self-expression is. The pupil's expression must follow the conception of an idea on his own part. It is perfectly legitimate for the teacher to try to deepen the student's thinking and to stimulate his feeling. A teacher who has dramatic ability may occasionally find it wise to illustrate in action but such illustration should be true and should never be repeated often enough for the student to imitate. Keep clearly in the pupil's mind the fact that his aim is to make his audience perceive and feel those things which the author perceived and felt and expressed in literary form. This purpose will tend to keep the thought away from self and will destroy imitation. It is far better for the student to be able to say with Touchstone, "A poor thing but mine own" than to be over-burdened by artificial methods which have no educational merit.

Blighting the imagination is charged against dramatic study. Every evil charged against the drama is due, not to its use, but to its abuse. Imagination is blighted because the children are permitted to attempt to present thought which they have not assimilated and have not made their own. Imagination is blighted when we attempt to produce in dramatic form material not suitable for dramatic purposes. The true play stimulates the imagination, and any play that blights the imagination is frankly a bad specimen.

Here we realize that much that is dramatic in spirit is not suitable for the stage. Browning's *Hervé Riel*, Tennyson's *The Revenge*, or Coleridge's *Ancient Mariner*, for example, are not possible for dramatization; the material difficulties cannot be overcome. *The Blue Bird*, I think, is far stronger in its appeal to the imagination when read than when acted, but the reverse is true of Shakespeare when

adequately-done. Imagination may be hindered because the teacher fails to perceive that suggestion and not realism is the purpose of all art. Apply this test to your prospective play; will its appeal to the imagination be enhanced by stage presentation? If your answer is "no" then don't attempt it. Avoid plays that depend upon mechanical effects for their success, for if these effects come off tardily "the unskillful laugh" and "the judicious grieve."

Some people claim that dramatic work fosters self-appreciation and conceit. Well, if there is one thing that acting will do when rightly used, it is to produce humility; only the person who can lose sight of his own personality and can, through sympathy, put himself in another's place can do satisfactory work. Let us make this clear by means of a practical illustration. I conducted at the University High School of Chicago, a course in the study of the drama. Our first play was one of the Irish National Theater plays, *The Turn of the Road*, a drama of true ethical and literary merit. The parts were assigned. Several of the young people were possessed of much natural ability and made an excellent showing at first. Others were naturally stiff and unresponsive, but yet eager to do their best. After a short time some of the really gifted but somewhat self-satisfied people found that they were making no progress; they could not get away from themselves, while some of the less gifted, through intelligence, earnestness, and selflessness, were forging ahead. It was not long before those who were gifted but self-centered recognized the truth of the situation and became humble and teachable. They put self aside and began to work out their own salvation. One fellow, who for several weeks appeared to be hopelessly undramatic, through intelligent perseverance gave at the last one of the best character portrayals I have ever seen done by a boy of his age. Had the play been presented before all had had an opportunity to mature, the naturally gifted would have been injured through self-satisfaction, and the real students would have failed to find themselves.

Extravagance of costume is another objection raised. This is a matter on which our school feels very strongly. If there is any extravagance of costume it is the fault of those in charge of the dramatic work. We must never lose sight of the fact that the play is the thing and that the drama should never be a show. Costumes have their place, but they must serve the story which the drama seeks to tell. Costumes should be simple and beautiful in color and in line, they



13. THE TURN OF THE ROAD

should never be so conspicuous that they take attention from the drama itself. Most people need to be taught that every costume must be subordinated and related to the whole picture.

The drama appeals to the eye and to the ear; it is the only one of the arts that appeals to two senses. Since the drama for part of its effectiveness depends directly upon what is seen, it follows that a sane amount of illusion is demanded. It is necessary to have a proper setting that shall serve as an appropriate, unobtrusive, and beautiful background for the story whose unfolding through speech and action is the main design of dramatic presentation.

The real purpose of scenery is to help create an illusion through the appeal to the imagination; only beautiful scenery can do this, and as a rule adequate scenery is a very expensive accessory and is ruled out of school plays on the grounds of expense if on no other. The useful and most generally satisfactory background is a chaste wall or a beautiful curtain of neutral tone. We have three curtains which are used as they best seem to fit the spirit of the play; one of gray-green, one of soft gray, and one of blue. Canton flannel makes a satisfactory and inexpensive material. Purchase it in white and have it dyed the color you wish. The dyers will give you the exact tone of any sample you may furnish them. For interiors it is a simple and inexpensive matter to have a set of carefully proportioned screens made after the Craig idea and covered with some beautiful material that shall make a very adequate and artistic background. If high schools,



14. THE TURN OF THE ROAD

instead of renting exterior sets made up of ugly back drops and impossible wings, or unlovely interiors of painted canvas, would spend a small sum on curtains and screens they could with the skillful use of light and shadows stage their plays much more cheaply and artistically than at present.

Appropriate costumes, the necessary properties, and stage furniture should always be chosen with greatest care. Suitable costumes are more important than a realistic background. Stage furniture should be kept down to the minimum required by the actual demands of the play and should be chosen with due regard to the canons of taste and appropriateness. Adequate properties cannot be dispensed with.

A thoroughly realistic presentation of Shakespeare's plays is a mistaken undertaking for any high school. The right settings cannot be obtained, and the change of scenes make an amateur performance most tedious. We produced *As You Like It* at Mandel Hall, University of Chicago, in a very simple but most effective manner. Speed of action and concentration of attention were gained by having but one intermission. We acted as a group all of the scene which takes place out of the forest; brief pauses indicated lapse of time without the dropping of the curtain. The stage for the first setting was hung with a soft burlap curtain of natural color; the floor was covered with a blue-green cloth; in the center of the stage at the back was placed a tall piece of statuary with a half-circle of box and bay trees for a background; at the right and left of the stage were two quaint iron

lawn seats backed by box trees. The stage was carefully lighted, and the result was a scene that was not only suggestive but exceedingly lovely. The second group of scenes comprised all of those in the forest; again lapse of time was indicated without dropping the curtain. For this scene in the forest we used for economy's sake the same brown background—could we have afforded it we should have liked to try a soft blue curtain—and we set the stage with real ever-green trees, placing an old log or two in the foreground.

These two settings framed the pleasing proscenium, and gracefully draped crimson curtains of Mandel Hall made effective and unobtrusive backgrounds that lent atmosphere to the whole play and served to bring into relief the carefully costumed players. For an outdoor scene painted scenery should not be used unless one is able to procure (and that is rarely possible) a back drop that is painted so beautifully that it is really picturesque. If such a panorama drop can be obtained, then it should be used with curtains or tall screens covered with green cloth at the sides of the stage. Avoid the ugly, inartistic painted wings that never did and never will create an illusion of reality or add in any way to the picture.

Lighting is an important consideration in staging a play for we cannot always place our stage, as we do a picture, so that we may have a good natural light upon it. We shall need artificial light in order that we may see what is being acted. Today people are learning to handle illumination so that beautiful, subtle effects of light and shadow are gained, and illumination has come to play a very important part in a performance. Footlights are to be avoided because they tend to draw an unpleasant and inartistic line across the lower edge of the picture which often bothers both audience and actors. Border, side, and bunch lights furnished with dimmers, together with a baby spotlight, are to be found on a stage well equipped for artistic performances. I believe in the darkened auditorium because of the effect upon the actor. Unable to see the audience distinctly, he is not distracted by them; and the well-lighted stage takes the actor away from the outside world and gives him the feeling of the realm of play and of fancy.

People often ask if it is not injurious for a person to play the part of a bad character. There is no danger to be feared because every part is played for the purpose of bringing out the constructive central idea of the play. In every good play the issue between good and evil is unmistakable, and the certainty of the triumph of right is constantly



15. TOM PINCH

in the consciousness or sub-consciousness of every one. The person who plays the part of the so-called villain is able to do so because he sees how contemptible the character really is. He is constantly contrasting the evil with the good and is always conscious of the immutability of right. A young fellow who got great pleasure as well as profit from the playing of the hypocrite, Pecksniff, in a dramatization of Dickens' *Martin Chuzzlewit* said many times "Oh, how I detest Pecksniff!" Had he not detested the man Pecksniff he could not have played the part, for he would have lacked a perspective. It is said that "it takes a thief to catch a thief" but to portray a thief artistically on the stage takes an honest man who can perceive the abnormality of thieving. It will not harm a person to act any part in a wholesome play.

The voicing of a fear that the having of plays in the school will cause many to go on the stage would provoke a laugh if it were not for the fact that so many entertain the idea. There is no more danger of the dramatic work making everyone take up the professional stage than there is that woodwork will encourage all to become carpenters or that the training in drawing and painting will make everyone rush into the field of art. The serious work of getting ready a worthy performance destroys in the mind of the actor the sentimental glamour of the stage; and the difficulties that have to be surmounted in the attempt to portray a character dispel any false notion that he may have entertained that he is a born genius. While students love the preparation of a play, yet it serves to make them realize that to become a successful actor means the hardest sort of work. Even a slight glimpse into the real significance of dramatic art may serve to satisfy



16. TOM PINCH

the yearning of many for acting and save them from taking up the theatrical profession only to be disillusioned and bitterly disappointed.

There may once in a while be a person who should take up acting as his life work, and it is of great value that the one talented person should be discovered early because the way of art is long.

It is claimed that artificiality is an evil that results from dramatic work. Artificiality results only from poor teaching. We cannot expect people who are not specially qualified and trained, to handle wisely the dramatic development of young people. We no longer expect every teacher to be able to teach all subjects. We have specialists to teach drawing, music, domestic science, physical training. Why should we not have people who at least have some understanding of the value of the dramatic instinct and the method of its development? School theatricals and dramatic art are not synonymous. The average person knows almost nothing about preparing a class for the presentation of a drama. Some very intelligent people watching an early rehearsal of *The Melting Pot* said, "Why is there so little action? Why do not the characters do more?" These people, had they been conducting the work, would have then and there introduced action and by

doing have helped to make the children artificial. Activity came in its time in the educational way as an evolution, as a result of a demand within the actors for a fuller expression of a thought perceived, an emotion felt. Players must think more before they can do more. There is a real danger from having untrained and unskilled people directing the dramatic work. It is an avenue of education that can be effective of the greatest intellectual, physical, and spiritual good to young people if it is in the hands of one who comprehends the significance of the dramatic instinct and know how to develop it. The normal schools and the colleges of education should give their graduates better preparation for the teaching of this subject which is at present in its infancy.

A full statement of the way in which the training of the dramatic instinct is to be handled in the high school would require a volume in itself. I shall be satisfied if I have given some of my readers a better appreciation of the great good that can come through the right development of man's dramatic instinct, and if I have encouraged the teachers of literature to give special attention to this valuable branch which is bound to be recognized as an integral part of all well-rounded educational development. The regular course in literature needs only to be carried to its logical conclusion to give the needed exercise to the dramatic instinct, and I hope I have suggested the way in which to begin to develop this instinct. The study of literature should be dramatic in spirit; there should be a considerable amount of dramatic expression which is not necessarily a formal play, but yet serves to stimulate imagination, free the agents of expression, and prepare the children for formal play-giving.

As children grow older, they should look upon the plays presented before the whole school as serious pieces of work, demanding a high degree of effort, and painstaking and thorough preparation. This means there will be few stage presentations in the high school. To get the real value out of the production of a play, a great deal of time and energy is demanded. If we are to fit children to become efficient members of society, we must not put an over-emphasis on any one subject. The wise educator should be able to recognize the intrinsic value of every study, and be able, through a sane perspective, to give it its due place. The educational pendulum often swings widely from extreme to extreme, because in our enthusiasm, or in our crystalized beliefs we lose our sense of proportion.

Not all literature is to be dramatized, nor every drama to be staged. The presentation of a play represents a social contribution, resulting from much study and preparation. A play done with costumes and properties before an audience seems to me to correspond, in a measure, to a picture framed for contemplation. No art teacher would permit a student to frame a rough sketch that he had made, no matter how patiently he had worked. There must be the period of apprenticeship. De Maupassant, under the direction of Flaubert, turned out manuscript after manuscript that was consigned to the fire. I believe that children should realize that a large appreciation of truth and a considerable degree of freedom, gained through practice in expression, should precede a formal presentation in costume and with properties. We must elevate the pupil's standards of judgment and hold him to his best. Therefore, I say few plays, as the children grow older, and these plays as carefully worked out as possible. Then the children will have that satisfaction and that development of power that comes from a thoroughly painstaking and beautiful bit of work.

I believe that many of our pupils at the FRANCIS PARKER SCHOOL are beginning to see that costumes and scenery do not make a play. They are beginning to appreciate that it is possible to stand before a group of people, and by voice and bearing make a story so real that the listener gets a vivid picture. They are beginning to understand that their ability to perceive a thought or idea vividly is a necessary step which must precede acting. They thoroughly enjoy doing scenes from great dramas without scenery or costumes.

Let us have as much literary study as we can afford time for in the high school; let the study be dramatic in spirit; let us have occasional scenes done without costume; let us have readings, recitations, and story-telling; let us make use of charades, impersonations, pantomimes, and uncostumed plays by one group for another, by one grade for another; but let us have occasionally a really beautiful and adequate play or pageant, done in the assembly-room, and so conscientiously and beautifully done that it shall linger in the thought of the school as a standard which it is a high privilege to maintain.

The importance of the occasion should determine the question of scenery and costume, just as the importance of the occasion determines what clothes a person shall wear. If the play is a grade exercise, we need the simplest accompaniment. If it is for a morning exercise, comparative simplicity again, not too dressed up. If we are present-

ing a play as a celebration of some festival, or as a graduating exercise, then we may utilize such properties and costumes as will enhance our picture.

"Costly thy habit as thy purse can buy,
But not expressed in fancy; rich, not gaudy."

The purpose of education is to help one to gain a true consciousness of the real self, and to acquire an understanding of one's relation to his fellowmen. To accomplish this end, education must set the imagination free from limitations of accidental environment and develop the whole self, physical, intellectual, esthetic, and spiritual, and thus help man to arrive at the real beauty and truth of life, the kingdom of heaven within, the consciousness that man is one with the beautiful and the true. The full development of the higher self requires more than physical and intellectual attainment; it must include the development of the esthetic and spiritual nature. The fine arts play a large part in this development. Dr. John Dewey, in his psychology, in a paragraph on the fine arts, writes: "Art is the attempt to satisfy the esthetic side of our nature. As the esthetic side of our nature is the feeling of the ideal as such, it follows that art can completely satisfy admiration only when it completely manifests the ideal. And as we have seen that this ideal is the completely developed self, we may say that the end of art is to create that in which the human soul may find itself perfectly reflected. Or as the essential factor in beauty is harmony, harmony with self, we may say that the end of art is to produce a perfectly harmonized self. The various fine arts are the successive attempts of the mind adequately to express its own ideal nature, or, more correctly stated, adequately to produce that which will satisfy its own demands for and love of a perfectly harmonious nature, something in which admiration may rest." And in another phrase he says of drama: "It consummates the range of fine arts, because in dramatic form we have the highest ideal of self, personality displaying itself in the form of personality. The ideal and the mode of its embodiment are both personal, and beyond this art cannot go, for in this man finds himself expressed."

A TEACHERS' MEETING

NOTICE TO TEACHERS, THURSDAY, OCTOBER 16, 1913.

Grade Meeting (Literature Room), 7:10 to 8:30 P. M.

Topic:

Written Expression in the Grades.

1. What stimulus have you seen the cause of interesting and valuable written expression?
 2. Is imaginative expression worth striving for? Is it better left to adolescence?
 3. Our children are all fair newspaper reporters. Can we supply any stimulus to esthetic expression?
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It is a cherished custom in the Francis W. Parker School for all the teachers to assemble in a weekly meeting Thursday evening, to consider applications of pedagogic principles to the work of the school. On rare occasions the teachers divide into two or more groups for special purposes. It was such a group which, on October 16th, discussed the matter of written English in the grades. The group included all the grade teachers and a few others. Practically every one aided in the discussion. In response to question 1 (above) all the grade teachers had handed children's papers to one of their number who, in the absence of Miss Cooke, the principal, had charge of the discussion. The report here given is from the stenographer's notes, but the stenographic report has necessarily been amplified considerably in places and cut in others.

Leader.—A good teachers' meeting should be like a good recitation: every one should be stimulated to think; every one should contribute voluntarily to the discussion; the leader should have a result in mind, but should be glad to find at the end that the result is far different from what he planned—and far better. There is another resemblance also: that every one should have made some preparation and should use this intellectual material for further thinking under the stimulus of other minds and skillful guidance.

Miss H.—I suppose it was with that in mind that we were asked

to think about this question: What stimuli have you seen result in valuable written expression?

Leader.—Yes. I can't promise the skillful guidance, but the papers on the desk are evidence that every one has contributed material for discussion. We might very well begin with the book of "*Spring Poems*" written by the fifth grade, if Miss ——— will read some of the poems and tell us how they were made.

Miss M.—These verses were written in the fifth grade several years ago. The printing was done by a seventh grade. There are sixteen poems in the book. I will read one or two:

THE AWAKENING OF SPRING

The sleeping fields and meadows,
At the call of spring,
Awaken after winter's doze,
And the birds begin to sing, to sing
Of the spring, the glorious spring.

The cattle all are grazing
In the pastures green,
Their smooth old heads are never raising.
In every flower can be seen
The joy of spring, the glorious spring.

And when the spring is gone,
Comes summer and her beauties
In the garden and on the lawn.
But the spring is best for all.
Oh, the spring, the glorious spring!

Doris

SPRING IN THE FOREST

The grass is green,
The robins are here,
And birds are thick in the air.

The animals hunt,
The wild bears roam
Far away from their native home.

The fields look green,
The trees make shade
In the far away, lonely forest glade.

Frank

The children did all this writing in school. The literature periods on the days preceding were spent in reading to the children all of the best lyric poems I thought they could understand and enjoy. Then we spoke of the coming of spring and our pleasure in it and the expression of this pleasure in our May Day Festival. Then each chose some favorite ideas or group of ideas and wrote about them. Each child worked independently until he had produced the best result he could. Then the poems were read to the class. Necessarily the subject of rhythm and rhyme came up. The children suggested the rereading of the "beautiful" poems, so that they might observe more carefully the rules of rhythm and rhyme as there exemplified. Once more they went back to improve their work. When they had exhausted their own power, they called on the class for final criticism.

Leader.—Can you recall what was the chief stimulus to writing in this instance? Was it from the thought that May Day was coming, or from the emotion spring arouses in everyone? Or was it chiefly from the reading?

Miss M.—I think the reading gave them a feeling for the form; the thought of writing just for May Day was not so very important. The inspiration came mostly from the joy of the spring. But since it has become a custom of the school to celebrate May Day by crowning a queen, planting a tree, and dancing round a May pole, the queen has annually awarded a chaplet to the most successful poet. Most of the spring poems of late years have been written very definitely with the idea of competing for this honor. The chosen poem is usually set to music by some class and sung in the May Day exercise of the following year. From this custom have resulted some fairly acceptable verses, some written in the high school and more in the grades.

Leader.—Of course the children who wrote the verses in that book of spring poems have done creative writing always. One of the teachers had some verse from them when they were in the fourth grade.

Miss L.—Yes. This is a stanza that George wrote after a delightful excursion to the Des Plaines river—a geography excursion:

The river was all golden
As the sun shone down
On every little wavelet
By the June winds blown.

The children wrote poems, some while they were there. They received no assistance. In that grade everybody put his emotions into words. Frieda and Katherine were in the habit of writing, and they wrote some charming bits. Frank wrote some really worthy things. Even before they came to the fourth grade they made poems. Owen had written one the year before, and his mother had supplied one word.

Leader.—That same class in the eighth grade wrote the play of "True Thomas," which is the most poetic thing in prose any of our children ever did. It may be, therefore, that they are outside our discussion. We are trying to find what stimulus we have supplied that led to creative writing. The stimulus here almost seems to be in the children themselves.

Miss D.—Still, the example seems to have spurred on others who had perhaps as much imagination but less initiative. Granting that we seldom have a class in which so many children write readily, with a genuine sense of beauty of form, is it not true that there is some one in every class; in fact, that the capacity is in every one, and that if we used the one or two as example and stimulus to the others, we should have more of this sort of thing?

Miss A.—The fourth grade, in connection with their Greek work, learned a number of Homeric hymns and poems. These had led to a discussion of choice of words, and often we spent the greater part of a period selecting from the poems passages which were particularly beautiful and then trying to repeat the same thought in our own language. Just before the children began writing their poetry, we had in a simple way something about meter and rhythm. Then each child selected a topic and wrote. For several days we did this, always devoting a part of the period to criticism of the poems that were handed in, and then we began a group poem. The first problem was the subject. Every child wanted to write about Odysseus, but there was such a variety of themes suggested that the selection was difficult. Finally they decided to write a song that might have been sung by Odysseus as he was going home. One rather interesting point in the poem is the last line of every stanza. The children thought they would like these lines similar and in spite of all difficulties they clung to their point. It took us four days to write the poem. Nearly every child contributed something.

SONG OF ODYSSEUS

Our good ship speeds across the deep,
 The white waves dashing high;
 A careful watch my men do keep,
 And at the wheel* am I.

I would that I might see the shores
 Of our dear native land;
 My men they smite with shining oars,
 While at the helm I stand.

Now blows the good wind more and more
 While swift and true we fly;
 Before us lies the longed-for shore,
 And at the prow am I.

With eager eyes I've longed to see
 That unforgotten land.
 Away we sail on past the lea
 While at the bow I stand.

For many a year we fought in war
 But now toward home we fly.
 We'll soon be safe upon the shore,
 My noble men and I.

Leader.—Are we going to consider only verse? Isn't it worth while to try for imaginative writing in prose also? I mean in the grades.

Miss L.—The insuperable difficulty, to my mind, is that we ourselves cannot write. Writing is a gift, an art. We teachers stand appalled before the idea of the Year Book, because we cannot write. Bernard Shaw says, "He who can, does; he who cannot, teaches." Of course, we should not attempt seriously to teach what we cannot ourselves do.

Leader.—I differ from you on both points. It is true we cannot make artists; they are born. But writing, as Weber Linn points out, is not only an art but a craft. Any one can learn to use the tools with some skill. Words are the common material. Our teaching should be such that we give to every pupil adequate skill in manipulating this material—at the same time fostering the exceptional gift.

*The untoward fact that a Greek ship had no pilot's wheel was pointed out to the class, but the young poets' fondness for their own literary invention overrode their respect for historic realities, and the line must remain unchanged.

Every one of us could have been taught to write acceptably, with some ease and some finish. It is not adding something extraneous when to teach a child to use his own language beautifully; it is merely bringing him nearer to the normal man by developing his natural powers. As to the other point,—

Miss D.—I should like to hold up your hands on this latter point. I cannot write—I cannot write a letter. But it appears to me that I was robbed of my birthright. I should have been encouraged to express myself daily in writing, to express my ideas and feeling and not merely the facts I had acquired. If we avail ourselves of all possible stimuli, if we are constantly on the watch for them, if we guard against too much writing of the newspaper paragraph sort, these children will not be so aghast at attempting to set their thoughts on paper.

Leader.—Our children are not particularly aghast, to my mind. Nothing in the way of daily surprises is so unfailing as the ease with which every pencil moves. I say, "Every one write the first two or three speeches for our play." Scarcely one hesitates an instant. But the result is poor. I deprecate their "fatal fluency" as much as our analysis at the idea of writing. We need to curb this readiness and gain some skill, a nice use of words, pleasure in cadence, a critical taste that rejects the dull and superfluous. But mere writing, without criticism and training, does not give these things.

Miss C.—This story of Arnold's shows some results of criticism. It shows too, how the children's reading may stimulate them to write, and how their writing may quicken their appreciation of literature.

"This is a picture of me. I was about four and a half years old. In one hand I have a vase, in the other a picture book. The vase I am going to send crashing to the floor; the picture book I am going to tear into shreds; the chair I have already knocked down; the lamp I am coming to next. I had a right to do whatever I could—my mother had taken my brother to the theater and left me at home. I would show them that I was not to be fooled with. With that I went to work, throwing pillows off the bed and doing whatever I could. Then the sudden thought came into my mind, 'What would mother do when she got home? What would she do?' Not that I had the least doubt as to what my mother would do, but I kept repeating, 'What would mother do when she got home?' Then I hit upon a bright plan. They had left me at home to get me angry and make me cry. If I appeared content and straightened everything up and sat down with my picture book they would be disappointed. With this thought in mind I straightened

everything up, I put the chairs in place, put the pillows back on the bed, did whatever I could to make the room look shipshape. Then I sat down in my little chair, looking at the picture book. When my mother and family came home they said: 'Why, we can leave Arnold at home any time. He does not mind at all!' Thus ended my great plot for revenge against my cruel family."

Arnold's grade, in the Dickens centennial year, were all reading Dickens with great enjoyment. When Harriet looked up his life for them, they were all greatly interested in the amount of autobiographical material he had used in the books they had read, and especially in his tender sympathy with the hardships of little children, due to his vivid memories of his own unhappy childhood. They agreed to write stories, more or less close to fact, about their own early experiences. In a morning exercise, they told eight or ten of these stories, as you perhaps remember, and made drawings to illustrate them. Arnold's was interesting because he remembered the psychological experience and embellished the facts to make his points more strongly—a piece of technique acquired from Dickens. All of the stories were rewritten after very careful criticism. We worked for a fitting vocabulary and omission of the non-essential. In that same class is Henry, who loves to write, and whose intention in those days was to be a writer. When he was very little, he intended to be a king, but he gave that up later, and of course, he may have abandoned the idea of authorship by this time and turned his mind to business, as his father so ardently wished him to do. Henry couldn't write an acceptable reminiscence of infancy, though he tried, and I tried to help him. He was steeped in Dumas that year, shocking as it may seem, and was consciously and almost successfully imitating Dumas' style. He wrote, if you remember, two or three historical sketches for the "Recorder," attributing the defeat at Waterloo to a general's delay for a cup of chocolate, and that sort of thing. But he used his imagination once in a very interesting way. He and his mother went up north in the summer to escape the hay fever season. His mother told him that they were going to a French Canadian town, and his imagination set to work at once; but when he arrived he found a coarse, hideous, frontier town, utterly devoid of everything he had hoped for. To console himself, he wrote a story of the town he had imagined—a town utterly French, utterly cut off from the influences of modern civilization. The story had a very unusual quality of imagination. Henry's French class dramatized it afterwards, but we have never had it played.

Now I believe that Henry shows a better way to use vacation experiences than we generally follow. Can we not teach the children to treat the actual fact as imaginative material? What is the value of their writing vacation stories unless they learn something from it? Suppose that one story suggests a chance for beautiful description. The writer should see how a good author would use that material. Another story offers an opening for telling, vivid phrasing. Read the writer one of Stevenson's driving paragraphs, full of verbs, all striking home, and set him to work again. Lois, in the sixth grade, wrote such a story this fall. You could see, as you read it, how another child who had had the same experience might have failed utterly to put the life and motion into it that Lois did. But if the other child had the material, he should have been helped towards its better expression. Too often the product, though carefully written, is discouragingly dull. But we accept it. The child wasted his time writing it; he learned nothing about how to express himself.

Leader.—The fault is partly in the kind of writing we allow. A bare report of the facts observed on a science excursion is of far less value to many children than would be an attempt to voice the feeling aroused by the beauty of the scene. Children must learn to report accurately, but it is the lowest form of written expression, and we allow too much time to be spent upon it. That Dane who wrote a life of Shakespeare says that in Shakespeare's day every one was a fair poet and dramatist, just as in our day every one is a fair newspaper reporter. People have not changed; stimuli have changed. And think what we rob the children of if we do not awaken their appreciation of imaginative and descriptive writing. Nothing will so awaken this appreciation as the habit of trying to express adequately their own emotions and their philosophical ideas.

Miss D.—Then let's talk a little more about how to teach it. Is it better to leave it to adolescence? Children of thirteen to eighteen years are supposed to be full of surging emotions struggling for expression, of a feeling for beauty that ought to manifest itself in a "love for lovely words." We leave the training in composition largely to the high-school teachers now. Isn't it as well?

Miss L.—No. The attempt to express, results in keener observation, both of sensation and of emotion. The adolescent period sometimes begins as low as the fourth grade. Esthetic experience is one of the earliest experiences. A taste for words often appears as early at

least as the fourth grade. Witness the Greek play written by the fourth grade in 1908. (See Year Book II.) Five or six of that class had a very strong appreciation of the beauty of words—even their cooking papers showed it.

Miss H.—In my opinion, no children in the school are too young for training in this direction. If by written expression you mean composition, and you do of course, the first and second grades can do a great deal to teach choice of words and beauty of sentence by means of story telling. The fifth grade, in preparing the story of Sinbad for the morning exercise, did work that was pretty careful preparation for composition.

Miss L.—In our discussion of stimuli to imaginative writing, we must not forget literature. Children must be familiar with the highest, finest forms; they must have some background, not only of out-of-door experience, but of great literature.

Miss C.—May I read the story Drummond wrote last year? He succeeded fairly well, partly because he reads a great deal and partly because nothing could be read in class that his mind did not seize upon.

THE PRIOR FALLS ILL

Alas! It seemeth that King John's visit hath caused the Lord to inflict a terrible penance on our beloved brotherhood. No longer ago than this morn the good prior, Father Anselm, was beset by an evil spirit, which caused him to writhe and roll upon the floor, making ludicrous faces the while he uttered pious supplications for relief.

The good Jew, Isaac, who is a learned leech, saith there is small hope for our noble superior, for in his present condition (which is, to tell the truth, more than comely roundness) the disease by which he is beset is more to be dreaded than under more happy form.

Alas! This will be a sad blow. But who can tell? Is it not possible this is a special intervention of God in my favor? Is it not possible that by the aid of good, fat, jolly Father Jaques and some of my other merry companions of the chessboard and bowling green, I may succeed, by the death of the prior, to the post of treasurer, where I may have a goodly horse to ride forth to the manor house on my business of collecting rents and seeing to the business of the monastery?

While walking in the cloister, inhaling the fragrance of the flowers growing in the garth and listening to the doves cooing in the dovecote, I pondered this matter with myself, and although it is indeed an unholy thing to wish a man's death, it would be pleasing to me to have the handling of that business, which is now seen to by that great rogue, Brother Alfred. The matter made me anxious and uneasy, for at one moment I hoped for the good prior's death, at the next was saying aves

and pater noster for him—enough to save the soul of an ordinary man, all for the ease of my own conscience.

Thinking of my promotion caused me to make two great blunders in my work in the scriptorium, in penance for which I am wearing a wreath of thorns on my head.

I laid the subject before my friend and adviser, Brother Edmund, who, it seems, is troubled by the same thoughts of another office, and, indeed, throughout the whole brotherhood disquiet reigns.

It is not seemly that such plotting and scheming should be going on in our holy retreat, and if I do reach my desired position it shall be my first attempt to change the system.

Miss S.—It sounds as if he had read Browning.

Miss H.—We need to know how much you did in the stimulating of that. How nearly does that represent the grade?

Miss C.—I tried to have them thoroughly familiar with the period of King John. It is a period important to Americans on account of Magna Charta. Then we tried to imagine the character of a monk in John's time. We studied a monastery, and how the monks kept annals and were familiar with the news of the day. The children tried and tried and tried again to write a part of a monk's diary or to write some story which should be useful to succeeding classes studying the time of John. This story was not much better than Hermon's or Ted's or one or two others. It was Drummond's third attempt. He could not write a tale, as most of the others did, so I gave him part of Carlyle's "Past and Present" to read—the part about the Monk Samson. The psychological idea appealed to him, and he did better. I have kept most of the stories for later grades to use.

Leader.—Was it important for every one to try to write such a story? Why should you have Barrett, for instance, whose power of expression is so atrophied, struggle with that task? Why not select a few people who express themselves readily and give Barrett and others like him a different kind of work? Then we should not be satisfied with a mediocre result from an able pupil, as we are too prone to be. The able pupil can do far better than the poor one without putting forth all his powers, and we forget that the product is not the best he is capable of. It is democratic to ask all to do it, but such a course accounts for the fact that democracy and mediocrity go hand in hand.

Miss C.—I do not believe that neglecting Barrett will make Drummond a better writer. It is we teachers who must see the possibilities in every one and stimulate all to their best. We should suggest a task and keep it in their minds, but not hurry it. Let an idea grow and

ripen through a week or two weeks. Don't think a child idle because he is not writing or drawing or figuring. It is the crowding at school and at home that militates most strongly against satisfactory imaginative writing.

Miss H.—The present seventh grade seems to have a gift for language expression. I hoped at the beginning of the year that some of the grades might have something ready for the "Recorder." I thought of the seventh grade, who remembered the incident in connection with the Pictured Rocks which I had told them three years before. I thought it might make a good plot for a story and asked them to write one. They asked many questions about details, and then their grade teacher talked with them about points of view from which they might tell the story. They asked if they had to tell everything as it happened. I said, "No." They all wrote. It was a wonderful set of papers. Out of twenty-three papers, there were ten or twelve that were so good that they ought to have been read to the class. They criticized these stories, and then I did. Eight or ten of them wanted to rewrite their stories. The remainder felt no inward impulse to further effort, and since I know of nothing more deadening to good writing habits than to drudge against desire, I seconded the idea that only the volunteers should go on with the stories. I trusted to future occasion to stimulate the others. I made individual suggestions to those who had chosen to write again, and they began to work. Finally, the stories were completed, I read the best five to the class, and they chose one for the next issue of "The Recorder," and they chose wisely.

ON THE LAST BARGE

(A True Story)

On the southern coast of Lake Superior is a wall of rock. It is very beautiful, with gorgeous colors marked on it in streaks and spots. These rocks are called the Pictured Rocks. They are high and very long. Toward the beginning of winter there are bad storms on Lake Superior, and it is especially dangerous near this cliff, as there is no landing place for nearly forty miles. The rocks are almost perpendicular save for little ledges made by the breaking off of the soft sandstone.

A steamer towing two barges plowed its way through the water opposite the Pictured Rocks. Night was near, and there was a bad storm. Most of the men on the last barge were in a group on the deck looking at the wall of rock, the outline of which could be dimly seen through the gathering dark.

"It'd be mighty dangerous near them in a storm," remarked one.

"Looks mighty rough, don't it?" said another.

On the other side of the barge, leaning against the side, stood a man, seeing nothing, hearing nothing. Life had been a long, hard struggle for him, and he was defeated. He still worked, but he had no ambition, he cared for nothing.

"It don't seem hardly fair," he thought. "There's Jim now. What's he ever done to be always getting higher? I don't see. Yesterday, it seems he was working at my side; tomorrow like as not he'll be too high to be my boss, as he is now. I'll be like the dirt under his feet."

These were his usual thoughts. In fact he was so taken up with self pity that the men called him Sleepy Sol. Jim was even now discussing him with M'randa.

"If he'd only wake up and take notice, a feller'd have more patience with him. As it is, he's too busy doin' nothin' to think o' anyone else," said Jim.

"Now, Jim, don't be too hard on him. Many's the time he's peeled my taters when you was too busy. An' I reckon he does his work as well as you," was the cook's reply.

Jim laughed as he took a knife and vigorously attacked the big bowl of potatoes standing at M'randa's elbow. M'randa, besides being the cook, was the only woman on the barge. Therefore the twelve men whom she fed regarded her with respect.

"Now, M'randa, don't get het up. I only—What's the matter?" For man, ghastly white, had run into the kitchen.

"Where's the megaphone," he cried wildly. "The megaphone, where is it? The hawser's broke."

"Here it is. Come on," cried Jim, and the two men dashed out.

"Loose, and in such a storm!" came from M'randa's white lips, as she sat still, almost too dazed to think.

Outside, the storm raged more fiercely every moment. The great waves lifted the barge high up into the air, only to let it sink quickly down, down till it seemed that the next wave would never come to lift it out of that deep chasm. The men shouted in vain through the megaphone. Above the din of the storm nothing could be heard. At last they gave it up. Slowly the night passed. The little group on the barge huddled miserably together. The storm, instead of abating, grew fiercer. At length the men saw signs of light in the east. As the light grew stronger they saw something which made them gasp with horror. Scarcely thirty yards away from them, towering high above them, were the Pictured Rocks. That wall of rock, so beautiful on a calm day, now was the most terrifying sight they could imagine. And every great wave brought them nearer. In a few minutes—

"We're getting nearer every moment," shuddered M'randa.

Nearer, nearer—it was terrible. There was surely no way of escape from those rocks. Suddenly Jim sprang up and got a rope.

"I'm going to jump for that ledge," he said quietly. "If I reach it I'll climb up and let down the rope."

Ledge! Yes, there it was, a little ledge with a few shrubs on it. It was over half way up, but the monstrous waves lifted the barge nearly on a level with it. Jim waited till the boat was on the crest of a wave, and then he jumped. The men held their breath. Would he get it? A groan of horror escaped, for Jim had clutched the shrubs for one short moment and then, slipping, had fallen with a cry to be dashed against the rocks.

The men stood silent. So simply, so nobly, had this man given up his life in the effort to save his companions that even in this time of danger they were impressed with his heroism.

Then one man, large and strong, spoke.

"I don't call myself a coward, but I wouldn't jump after seeing that."

Then Sleepy Sol stepped forward.

"An' I don't call myself particular' brave, but I ain't much to live for anyway. I'll try."

Fearfully the men watched him as he tied a coil of rope around his waist. He, too, waited. Then he jumped.

A mighty cheer arose. He had landed safely on the ledge. But there was still the difficult climb ahead of him. That, too was dangerous. A slip would mean instant death. But he reached the top safely. He let down the rope, and the men, preceded of course, by M'randa, climbed up. Then they rested a few moments before going to Munising, the nearest town. As they walked slowly along, Sleepy Sol saw a new respect for him in the eyes of M'randa and the men.

Elizabeth

Miss H.—I think many times we are afraid to make enough suggestions. For instance, Mary wrote a story for "The Recorder" and it lacked climax. It was weak at the end. I talked it over with her and made some suggestions. Later, she came to me and said, "Would it be right, Miss H., for me to do just as you said? I didn't know whether I had a right to do that. Geneva said I ought not." It seems to me that to give a child help is right. If the plot falls down at a certain place, surely it is not wrong to show exactly how to bring it up. Moreover, it is individual help that counts. If I personally am shown how to retrieve a certain awkward sentence that I have struggled with, I am encouraged more than I could be by the best of group lessons.

Miss C.—There is another stimulus to which we have barely alluded that has much in its favor. This is the writing of a play. The motive is so strong that every one is roused to his best creative power. No one has to make a sustained effort, as he does in writing a story, but speech after speech must be made, and as each speech must aid the movement of the play, a basis for criticism is afforded.

Leader.—We have illustrated a few stimuli which we have seen result in interesting written expression—May Day, an excursion, vacation, the writing of plays, literature, history, the example of others. Preparing for an important morning exercise is often an incentive to dignified, adequate writing among the older children. The children's summer letters to us, if we knew just how to use them, might be a genuine expression of something more than a belief in our interest. The Weekly affords a chance to write briefly, with an eye to freshness of material and freshness of expression. In short, I believe that the number of possible stimuli is very great, and that we are culpably neglectful of our duty, when we allow such a vast bulk of unimaginative writing. If we can close the meeting with everyone somewhat stimulated to effort, some views slightly modified, some practice slightly changed, it is as much as we can hope from one discussion of training in esthetic expression.



CLAY MODELING

Clay modeling is by no means a new factor in the school curriculum, yet for some reason educators have devoted less time to discussing it, at least in print, than to almost any other subject taught.

To one who believes strongly in the educational value of modeling, the realization of this dearth of literature on the subject comes with some feeling of shock. Psychologists, teachers, and artists have discussed drawing and painting as a means of expression and thus of education, and have produced a considerable volume of material concerning the value of those studies in elementary and secondary grades. Then why is there not more discussion of modeling?

This question forces one to analyze his own point of view, to search for reasons for his confident belief that clay modeling can do some things for the pupil which cannot be done by any other study in the curriculum and can do other things *better* than they are done by any other study.

The acquisition of any new art means acquiring a new way of seeing, thereby widening one's possibilities of expression—increasing one's expression vocabulary, as it were. But what does clay modeling do in particular?

In trying to answer this question to myself, I have made a list of arguments which seem to me valid for the use of clay in schools, considering first, modeling in general; second, figure modeling (*sculpture* seems too dignified a term for the childish shaping of animals and people, in the round or in relief, which we do in school); and third, pottery. I have also cited quotations from thoughtful students of the subject to corroborate my arguments, and I have further reënforced them by experiences we have had in this school. In this list, the first reason given is the children's reason. The other points are the teacher's motives for putting this study into the school. Under the head of modeling in general, there are eight points; under figure modeling there are five points, three of which apply to modeling in the round, and two to modeling in relief; under pottery work, there are eight points.

I. CLAY MODELING IN GENERAL

1. In considering whether or not a subject has a place in the curriculum, one has to begin by asking whether it is one in which the children can see real value; for if they have no sense of vitality in the thing they are doing, that thing cannot be really educative. The answer to this question is so obvious in regard to clay work that it seems almost unnecessary to state it, but, since it is as important as obvious, it must be written down.

Almost all children love to manipulate clay, and they take great pleasure in using it either to illustrate some point in their work for their departments, or to make objects which they may keep for their own use or present to their relatives and friends or to the school.

The love of manipulating a plastic substance is a race heritage, a natural instinct of all ages, peoples, and times. Clay invites punching and shaping, just as a smooth surface invites marking. This instinct is one form of the "sense-hunger" born in man to lead him into developing the artistic and utilitarian possibilities of his environment and thus raising his own social plane.

Making objects for gifts is a thoroughly social motive which results in vigorous effort to produce good work; and many really attractive articles, especially in pottery, are made by the children. Among the gifts they have made to the school are jars, bowls, and vases for teachers; a chocolate pot and set of cups to be used at faculty committee meetings (a boy in the metal department made a copper tray to go with the chocolate set); desk sets; casts of various subjects in relief and in the round. Among the latter is a bust of "Mr. Pecksniff," made by an eleventh-grade student (in 1912—the Dickens Centennial Year) for use as property in the Senior play, which was a dramatized version of "Martin Chuzzlewit."

2. Modeling is a great creative activity.

The exercise of the creative instinct gives one a sense of power that cannot be equalled by any other sort of activity. The more of this creative power the individual possesses, the more he can contribute to society. Therefore all possible creative avenues should be opened to him, that he may choose the one that offers him the freest opportunity for expression. Modeling has been one of the great mediums of expression of the world, and we have no more right to close doors of opportunity before the embryo Michelangelo than before the

embryo Shakespeare. We should think it a crime to give a child with a literary gift no chance to put his thoughts into writing. It is just as truly a crime not to give the child who neither speaks nor writes fluently, but whose fingers can speak freely with clay, no chance to say his say to the world. It is mere justice to give a boy who is painfully embarrassed when he has to stand up and talk before the school the chance to show that, though he cannot do that easily and is not strong enough to shine in athletics, there is a field in which he can be a leader in the class and can make a sort of contribution to the class work which no one else is able to make, or, at least, to make so well.

3. Since knowledge of form depends chiefly upon the tactual sense, it must follow that to train that sense to delicacy of perception and execution must correspondingly enhance one's sensitiveness to form.

Dr. O'Shea* says, "Form is mainly a *motor* thing, so to speak; the retina alone gives but signs which must be filled out from motor experience." Modeling affords excellent opportunity for this motor "filling out." It records the actual shape in contrast to drawing, which records one aspect of the shape—a reduction from three dimensions to two. That this reduction is a complex process is shown by the curious drawings of children and primitive people, in which they attempt to express, by a combination of full face and profile views, facts that can be expressed properly in drawing only by an understanding of foreshortening.

There is no possibility of "bluffing" about form with clay, for one cannot hide any ignorance of form by change of position of the object. Modeling gives opportunity for the motor-minded child, just as graphic art does for the eye-minded and music for the ear-minded. This applies even more to children having defective eyesight than to those who merely have the predominating learning channel through the fingers. A certain high school pupil who has about one-third normal vision and writes and draws very poorly in consequence, can make quite acceptable pottery.

4. Clay is the simplest and most direct medium for expressing the great majority of three-dimension images.

Colonel Parker† says, "Modeling stands next to making in the nearness of its realization of the actual object to be represented." But

*Dynamic Factors in Education, p. 163.

†Talks on Pedagogics, p. 243.

making, although a truer realization of the concept in some things children want to express—furniture, boxes, sleds, etc.—is impossible in the entire realm of nature, where clay, on the other hand, can realize the concept in a very satisfactory manner. Moreover, materials used in making, such as wood and cardboard, are much less tractable than clay. Mistakes in them are difficult to correct—in clay, very easy. Clay requires no preliminary mastery of tools, such as is demanded for wood-working, for a great deal of very satisfactory modeling is done without other tools than the fingers.

That clay is a simple and natural material for expression is proved by its almost universal use, even in the most primitive stages of society, and also by the readiness with which kindergarten children learn to use it successfully.

5. Clay is a convenient material for illustrative use because it is available both for quick sketch work recording immediate impressions and for careful analytical study.

6. Modeling is, in itself, a quieting, restful occupation, free from the nerve-wearing noise of wood or metal shop.

Miss E., a teacher, who was in a highly nervous state, found clay-modeling the most soothing occupation she could work at; Mrs. M., a high-strung society woman, suffering from nervous break down, was advised by her physician to undertake clay work and was much helped by it.

7. Clay is a material so universal and inexpensive* as to be available anywhere.

When glazing is impracticable, the ware may be biscuited (fired once) in brick, earthenware, or china kilns,† and finished with shellac or wax. If no kiln is available, plaster-casting can preserve the best work, especially reliefs, and for remaining pieces mere drying is often adequate for school purposes. Our kindergarten children sometimes make paper weights in the form of fruits. These are fired once, then the children paint them in the natural colors with water-color paints and finish by coating them with thin shellac. Older children may make pots decorated in Indian style, using for paint earth colors and metallic oxides applied upon the moist clay and, when the ware is

*We pay one cent a pound and carrying charges amounting to nearly one cent a pound. We buy by the barrel, which weighs 400 or 500 lbs.

†Not when china is being fired, lest the raw ware harm the decorated pieces.



17. INDIAN JAR MADE BY PUPIL IN SIXTH GRADE

dry, firing it once. Greek jars may be made of red clay,* the designs being painted with metallic black (copper and iron oxides), and the vessels fired once; or, if the child's skill is not equal to using this heavy pigment on fine details of pattern, the jar may be fired first and then painted with black water-proof ink. (See figs. 17, 18, and 19.)

The shaping of clay has significance, not only pedagogically and physically, but also as a symbol.

Edward A. Spring says:† "The moral effect of this occupation is special; the yielding nature of the clay seems to develop conscious power, and to prophesy the dominion over material nature—while the indestructibility [he means of fired clay, here] reveals the inexorable-ness of law—truths which are opposite but not contradictory."

There is certainly something of marvel, magic, mystery in the feeling one has as one watches a skillful modeler with a few touches

*Where good natural red clay is not available, as substitute use: 100 parts common gray clay, thoroughly dried, 10 parts burnt sienna (dry powder), 10 parts yellow ochre (dry powder), 3 parts barium carbonate (powder). Grind up with water to make slip, which may then be dried to consistency fit for modeling.

†"Clay Modeling for Kindergartners," Barnard's "Kindergarten and Child Culture Papers," p. 685.



GREEK JARS CAST, FINISHED AND DECORATED BY FOURTH GRADE PUPILS FROM WOODEN PATTERNS TURNED BY HIGH SCHOOL BOYS



19. GREEK JAR MADE BY ELEVENTH GRADE PUPIL



20. SKETCHES FROM LIFE BY NINTH GRADE PUPILS

transform a meaningless lump of clay into a figure full of action or into a charming piece of pottery. The sense of magic is especially strong as one watches a potter at his wheel. Even when one is the potter oneself, there is still a feeling of wonder at the instantaneous response to the least touch; and added to this there is the joy of the maker—the artist—in his power over his medium, combined with a grateful appreciation of the cleverness in the brain of man that enabled him to think out and apply this particular harness to nature's forces, that they might serve his need. Longfellow has expressed these feelings in his poem, "Keramos," and Browning in "Rabbi Ben Ezra," but such expression is by no means limited to the modern poets. Horace, writing "De Arte Poetica," uses the shaping of a jar as a symbol of unity and fitness in endeavor; and in Jeremiah XVII, the Prophet draws a lesson from watching the clay in the hands of the potter. If this lesson has been worth while to people of such widely differing ages, may it not be worth something for our children?

II. ILLUSTRATIVE MODELING

(a) *Modeling in the Round.*

1. Modeling in the round gives opportunity for the same kind of dramatization that children delight in when playing with a toy village or doll's house. It has, however, the additional values of increased range of subjects (farm, Indian village, Arab camp, animal habitat groups, etc.), and a new fund of information gained by the



21. MEMORY SKETCHES BY PUPILS OF SIXTH GRADE

children through observing and recording in their own handiwork facts they know, instead of merely playing with ready-made toys.

2. This sort of modeling demands careful observation; much comparison of type with type; study of proportion; details of anatomy and costume, etc. (See figs. 20 and 21.)

A boy who came into our school in the second grade drew very well, but had never modeled. His first clay animals—some pigs—were flat, like animal crackers: for, having made many flat drawings, he retained the impression of that flat expression in spite of having seen the real thing. But after he had once felt the roundness of a clay pig made by another child, he began to shape his properly, and then his drawings, which had previously been outlines only, began to show details within the outlines: the limbs stood out from the body, near and farther legs were distinctly indicated, etc.

3. Figure modeling leads to an acquaintance with, and love for, the great sculpture of all ages, one of the greatest fields of esthetic enjoyment and culture.

Children having modeled various well-known casts, find themselves greeting these as acquaintances when seen at the Art Institute; the originals seem old friends when encountered in European galleries. Postcards come back from London, Paris, Florence, or Rome, saying: "Saw the Spinario (or Venus de Milo, or Jeanne d'Arc, or the Medici tombs) today and thought of you and of the class." Having themselves tried to make figures, the children have great added respect for real sculptors and are immensely impressed when given the opportunity to see a sculptor at work. Such remarks as these are common: "I

had to wait an hour down town Saturday, so I went to the Art Institute and looked again at the statues we saw last week, when the class went there. How could the Greeks make such beautiful figures, when they hadn't many beautiful statues to look at first?" "How long did it take Mr. Lorado Taft to make 'The Great Lakes' fountain, and did he have to try over many times before he made it so beautiful?" "Mr. Taft has very beautiful dreams, and I hope he'll be able to make them all come true in marble."

(b) *Modeling in Relief.*

1. Relief modeling affords opportunity to represent certain subjects which are difficult to execute in the round, such as certain historic scenes, or illustrations representing flying creatures, trees, flowers, ships, etc. (See fig. 22.)

2. This kind of work affords a rich opportunity for the study of decorative design, especially in the application of plant form to ornament. Charming decorative plaques or panels may be made in this medium for wall decoration or for insets in window boxes or other furniture.

III. POTTERY

1. Pottery work demands a degree of accuracy and care in the manipulation of material (lest the lopsided vase upset or the ill-welded one burst in firing) not to be looked for, especially from young children, in illustrative work.

Even little children will work for several lessons on a piece of pottery without showing fatigue or lack of interest, for they can see constant progress toward more perfect form. The habit of making the expression correspond exactly to their image strengthens and clarifies the latter, which in turn produces better expression. But in modeling animals or people, the form is much more complex; there are so many details that all but the most prominent ones are lost sight of; and when these few salient features are expressed to the child's satisfaction (which can be done in a few moments), he has done all he can do with the object, till a new experience of the thing he is trying to express—another visit to the farm, the Zoölogical Garden, or the museum—makes him conscious of the presence of other factors than those he had previously recognized, or of inaccuracies in his recording of them.

2. Pottery making uses both hands in the same coördinations more than any other departments except that of physical training,



28. RELIEFS OF GREEK SUBJECTS MADE BY PUPILS OF FOURTH GRADE
 Above—Athena as Patron of Useful Arts; Zeus Weighing the Souls of Men; Hermes
 Bringing Apollo the Lyre; Victory Crowning a Victorious Warrior; Artemis Hunt-
 ing; Poseidon Guarding a Ship from Rocks.
 Below—Athena Answering Prayers of Warriors; Hector and Patroclus; Greek Soldiers
 before the Wall of Troy.

thus developing in the left hand the deftness usually limited to the right, and thereby strengthening the sense of bi-symmetry.

Mr. Spring says: "Many children are rendered clumsy for life by using only the right hand. Modeling necessitates a skill of both right and left, and children acquire it rapidly."

3. The designing and making of pottery awakens a sensitiveness to symmetry, beauty of proportion, subtlety of curve, especially to the fitness of the object and its decoration to its use, which few other arts can equal.

Dr. Montessori,* after speaking of the historical and religious significance of the potter's art, continues: "Besides the civil and moral importance of the vase, we have another and practical one, its literal adaptability to every modification of its form, and its susceptibility to divers ornamentation: in this it gives free scope to the individual genius of the artist."

4. Pottery affords opportunity for many kinds of decorative treatment: stamping; incising; inlaying; decorating in relief; and painting with slip, with under-glaze color, or with glaze. It thus lends itself to skill of any degree.

5. The potter's art gives opportunity for the child, especially the boy, who has a gift for mechanical accuracy but lacks the imagination to express himself freely in illustrative modeling or drawing, to work in a medium less rigid than wood or metal, and so to give grace and flexibility to his ideas of form without turning him adrift on the to him—uncharted sea of imaginative modeling. It also affords a chance for older children, whose critical faculties have developed beyond their executive powers, to make really beautiful and useful objects when they cannot make sculptural studies that satisfy their esthetic ideals. (See fig. 23.)

6. Pottery arouses an interest in the history of civilization as handed down in the almost universal records of the potter's art. It correlates closely with the other work in history, nature study, commercial geography, and, in the subject of glazes, with chemistry.

Dr. Montessori,† following Professor Randone, has much to say upon the value of pottery as a means of teaching respect, appreciation, and love for objects, monuments, buildings, etc. She considers it a really important part of civil education.

* Montessori Methods, pp. 164-5.

† Montessori Methods, p. 163, et seq.



POTTERY MADE BY CHILDREN FROM FOURTH TO TWELFTH GRADES

7. The terra cotta industry, including building terra cotta, brick and tile making, and pottery, is the third mineral industry of the United States, only coal and iron surpassing it in importance. Therefore, it deserves consideration in the school curriculum. An industry affecting so many people ought to be a means of lifting national esthetic standards and, through esthetic, moral ones. This cannot be done except by the trained manufacturer's responding to, and in return cultivating, an intelligent and refined public taste. By developing in children high esthetic standards for clay forms, we help to produce national good taste and, thereby, good morals; for, as Ruskin says, "What we like determines what we are, and to teach taste inevitably terminates character."

METAL WORKING

Metal work, one of the oldest handicrafts of the world, has but recently been introduced into the schools. In it the children of the present day have an opportunity to show their individuality through working with the metals and to develop a familiarity with and an appreciation for this most interesting branch of artistic expression.

The exquisite gold and silver work of Egypt and Greece show to what perfection the art was developed in ancient times; especially in the Mycenæan age great ingenuity was displayed in creating new and beautiful designs in all sorts of ornaments for personal adornment, as well as in articles for domestic use and weapons for warfare and the chase.

In exhuming some of the great treasures buried in Greece, many varieties of hair ornaments, rings, pins, necklaces, bracelets, and diadems of pure gold, intricate and artistic in design, have been found. In the Middle Ages the young boys were early apprenticed to goldsmiths and worked for many years, side by side with the master, to gain perfection and skill, taking great pride and enjoyment in their work. Today metal work proves very attractive to most pupils and interests them more than working with other materials. In addition to the natural desire for personal adornment, the artistic, technical, historical, and social value appeals to them.

What could be more interesting than beating up an artistic form from a piece of sheet metal or making a beautiful piece of jewelry of artistic design and fine workmanship? In the first place there is the big, free stroke of the hammer, which, properly directed, will stretch or thicken the material at will, until it is the shape planned or one even more pleasing. For often the worker, like the early craftsman, is inspired by the quality of the material and creates his design as he works. In making the piece of jewelry there is the pleasure of selecting the right stone for a pendant or ring and developing the design; then follows the careful work of bringing out the beauty of the idea in the metal. For, however simple, artistic expression in any material must be beautiful, and in designing articles of copper, silver, or gold there is a chance for gradual growth in good taste.



24. ARTICLES OF COPPER

It has proved interesting and valuable also to the metal classes to visit museums, studying the charming old pieces of work which have been brought to light after being buried so many hundreds of years, and comparing them with the arts and crafts exhibits of the present day. The history of the goldsmiths of mediæval times is intensely interesting as exemplified in the directions given by Theophilus regarding the preparations of the work room, the benches, and the kinds of "instruments" necessary; and in his instructions to his craftsmen on "How to make the handles of the chalice," or "How to prepare a silver vessel to be beaten with a design." The treatises of Benvenuto Cellini are full of charm and also contain valuable information on the processes of metal work.

Almost invariably the pupil just beginning to work in metal expresses a desire to make an ornament of silver or gold for personal adornment. He knows nothing of the comparative value of the metals, the texture or responsiveness of the material, the use of the tools, nor the relation of designs to metal forms. These things must be explained to him, and laboratory experiments by the teacher are often necessary. He is brought to see that a piece of gold would be too costly to use for his first effort, as it might be spoiled in the making. He soon sees that it is unreasonable to use this beautiful material for unskilled work. Moreover, gold and silver as generally used are not in their pure state, but alloyed with other metals, and therefore are harder to work.



25. SILVER WORK

It is, then, suggested that it is best not to attempt work with the precious metals at first, but to make some simple though useful articles in copper. There is much of interest in the copper; the hardening of the metal by pounding, and the consequent resistance to handling; the softening by annealing, and the resulting pliability; the manner in which it responds to the touch of the hammer and tool; the durability; utility; and the wonderful fire colors. The worker becomes enthusiastic over these characteristics of the metal and enjoys making a simple article which he was perhaps loath to begin, but which he finds most interesting and well worth while.

The more skill he has acquired in these first pieces, the more beautiful will be the ornaments of silver and gold which he will later produce. A particular charm of the jewelry is the realization that the completed article is worthy to be worn as a personal ornament by oneself or a friend.

The education of a pupil is broadened in many ways by his contact with the metals. He gains in comprehension and appreciation of artistic expression in form and design. The concentration of mind, the patience required, the appreciation of others' work, the ability to



26. JEWELRY MADE BY SENIOR CLASS

bring into play the fine and complicated organization of the hand, and develop character as well as good workmanship.

Perfection in technique is not expected before work in silver and gold is permitted, but there must be a certain amount of drill in order to learn the use of tools and to get some idea of the construction and the different processes of working on these metals.

The first articles made have little or no design beyond the general shaping of the tray or bowl, but an effort is made to keep these in as good proportion as possible. When the children begin designing for metal they are told to keep in mind the character of the material, the shape of the article, and the spacing of their patterns. At first it is difficult for them to see just what kind of design is suitable for this new material, but it is not wise to be too critical of their first efforts, lest they become discouraged by being held to a mature standard. But they are shown as many pleasing articles and good pictures as possible, and they presently come to feel that a design which would be suitable for wood carving or the decoration of textiles would be inartistic when used for chasing or embossing the precious metals, and that it is out of place to use one material to imitate another.

When actually doing the work on the metal the pupil learns to

understand its nature and becomes more and more able to express his ideas in an artistic way. For design and workmanship must act and react on each other. As he continues in his work, he becomes more critical and makes a greater effort to express his own individuality in appropriate designs.

Not every child that works in the metals will necessarily become a great craftsman, but through his efforts he learns to appreciate the work of others and to estimate artistic values. It is not unusual to see pupils examine a piece of work done by an expert craftsman and to hear them exclaim over the beauty of the article and the method employed in making it, saying to one another, "I never used to notice how handles are put on, or how a stone is held in place;" or "How much work there is in making a ring!" It seems that the more the pupils gain in appreciation, the more respect they have for their own work, and the more willing they are to strive for the ability and skill to make something of real artistic worth.



MAKING A RUG

In the second grade the undertaking in weaving for several years past has been a delightful coöperative problem. Once it was a banner to be carried on May Day. A proud white cock adorned the center of the green background, and the delighted weavers crowed lustily as they saluted their May queen. Again, when there was money to spare in the egg purse, the children bought a downy pillow and wove for it a pretty cover. This cushion is in daily use in the office, where mothers tuck it behind their backs when conferring with Miss Cooke, the principal, and at parties, where it helps make the big settle in front of the open fireplace cozy. Best of all, perhaps, at least in the eyes of some children, is its appearance on the stage at morning-exercise hour, whenever a play requires the use of such an article. This year we are making individual rugs for the baby group in the kindergarten to sit on when playing on the floor. But the article to be described in this paper was woven the first year we attempted the coöperative scheme.

That year the second grade decided it would be fun to surprise Miss Cooke with a new cover for her couch in the office, one that should be useful, durable, and as pretty as we could make it.

Such a problem was made possible by the work in the first grade, where the children's desire for individual ownership had been satisfied through the making of tiny rugs for individual play houses, and where some practical experience in weaving and in dyeing had been gained. In planning their rugs, each child had played with bright colors to his heart's content; boiling strawberries, dandelion blossoms, onion skins, etc., for dye materials, and using them without regard to their durability. The children therefore felt, when we began discussing plans for our new cover, that they knew how to make pretty colors. We decided, however, that a real blanket sometimes needed to be washed, and that it would not be pretty if its colors faded. The children offered to wash their rugs and bring them to school the next day. Many showed faded colors. Nearly all were woven unevenly. We wondered whether we could arrange these little rugs into one large rug.

We placed them on the table, side by side, and end to end, but the effect was very funny indeed, for no two were the same size; moreover, there were impossible gaps between the adjoining sides, and the designs, while very pretty as separate rugs, did not fit together at all when we tried to make a big one. The experiment, however, taught us several things to avoid.

But there remained many other points to consider, if we were to make a useful blanket; in particular, the size of the blanket, the number of parts into which we should divide it for convenience in weaving, and the kind of material we should use. Furthermore, there was the question of looms, and also the size of the loom, which depended upon the size of the different weaving sections; therefore, we had to stop and settle some mathematical difficulties. Finally, after three weeks of planning and measuring with ruler and yardstick, an outline, first roughly chalked off on the floor, was transferred to a large sheet of Manilla paper and hung up for reference.

Meanwhile, during the history periods, the children had begun their study of materials. They raveled threads from samples of loosely woven cloth, pulled the fibers apart, and, aided by simple sense games, identified each piece as wool, silk, or cotton. Then they further identified these fabrics, both in their clothing and in various household articles displayed for the purpose. At last they decided to use wool as their weaving thread, because they thought that clothes made of it were warmer than cotton, less expensive than silk, and more durable than either cotton or silk. One boy said: "If the cover is warm enough, Miss Cooke can use it in summer time for trips on the lake, or she can line her hammock with it and sleep out of doors at night."

The looms, when planned, were made in the shop; but just how they were made, how the colors were chosen, and how the yarn was dyed, are details told by the children in the following letters written to Miss Cooke after the cover was finished and just before it was presented.

The day the letters were written, the children planned in class what part of the story each should tell. Then they went by twos into the hall, where they talked together. On their return they wrote independently, but when the letters were finished, teacher and child together corrected English and spelling. The corrections made, however, were almost all in the spelling. (I make this explanation here, because the papers may appear surprisingly well expressed for children so

. This is due, I think, in part to the fact that throughout our pupils are given unusual opportunities for free written expression and in this grade particularly the children, for three or four years, had been making frequent written reports upon the chickens.)

Miss Cooke:

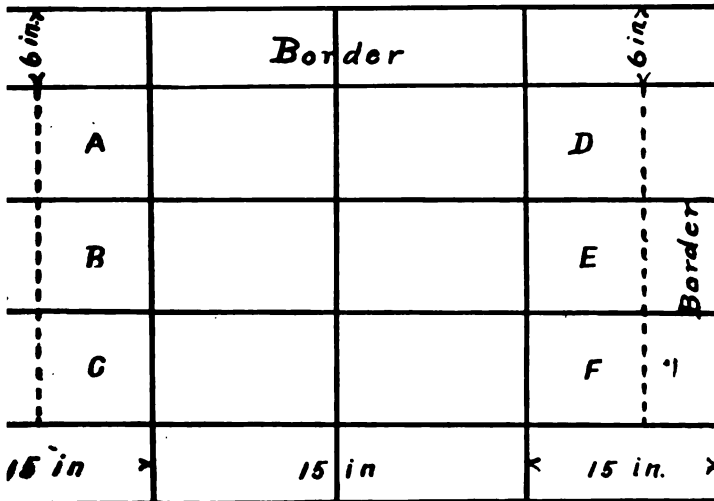
We slipped in your office to see the couch. We brought up the pad to measure it. I covered my mother with a shawl, so that we could see how big to make it. I found out what it would take to cover her. It was 3 feet long and 3 feet wide. We made ours 3 feet 6 inches so it would hang over and look nice. We did not put fringe on, because we thought it would tickle you.

EDWARD

Miss Cooke:

We planned to divide the cover into 20 pieces, because there are 20 children in the room. We wanted each child to have a piece of the cover. We thought the cover would look nice if we made a border around the cover. We drew some designs the size of the border. We decided that it would be best to have the border 6 inches wide. Each piece is 6 inches wide and 15 inches long. There are 12 pieces in the center. The pieces in the center are 15 inches long and 10 inches wide.

MARGARET



Scale 1" = 1'

Dear Miss Cooke:

We went down to your office to look at the colors. The colors in your room were brown, yellow, green, and tan. Miss Clements helped us to make some designs for the rug. We went down into your office again to see if your colors were like the colors we made. We found that ours were too bright and that the colors in your office were soft, so we made some designs again. We decided that the border should be brown, green, yellow, and the middle, tan.

JUNIATA



28. POURING WATER ON ASH HOPPER MADE BY CHILDREN

Dear Miss Cooke:

Miss Dewey helped me make my loom. First I took two pieces of wood and measured them both 17 inches long, and two others 12 inches long. The 17-inch pieces are sides. The 12-inch pieces are ends. We tied the pieces together. The side pieces are 1 inch and $\frac{1}{4}$. The ends are 1 inch thick. Then I drew a line across the ends and made $\frac{1}{2}$ inch dots. Then I hammered nails in the dots. Then I put a wire across the sides.

BARBARA

Dear Miss Cooke:

We made a rug for you. This is the way we dyed the colors. First we took the walnuts and took the husks off of them. Then each child measured 1 quart of walnut hulls and put it into 2 quarts of cold water and let it boil for 30 minutes. Then we took 4 ounces of white yarn and dipped it until it was a pretty tan color. Miss Larrabee helped to dye.

LISETTE

Dear Miss Cooke:

I am going to tell you how I made ash lye for dyeing yellow. First I put straw in the hopper. Then I put ashes in the hopper. Then I poured water over the ashes. Then in 2 days it began to drip lye.

BARRETT

Dear Miss Cooke:

I would like to tell you how we made yellow dye. There are two ways of making it, one of which I will tell you. We boiled black oak bark and put some alum in it.

The other way: We put a straw or two in the bottom of our ashopper; then poured water on it slowly. Copperas mixed with water makes copperas water. We dipped the yarn first in the lye water and then in copperas. (If it was not dark enough, we dipped it in* another time. It looked green, but when it had dried it looked yellow.)*

Dear Miss Cooke:

This is the way we dyed our dark brown yarn. First we put 2 cups of walnut shells with 2 quarts of water and put it in a large saucepan. After that we put it on the stove and let it boil for a half hour. Then we put the walnuts in a large piece of cheesecloth and let it drain.†

The way we did our weaving: Each child made a loom. We strung our looms.**

The piece I wove is in the border. We started this piece of work in the first of the year and just finished it. We have taken very much pleasure in making this and have woven our love in with the stitches.

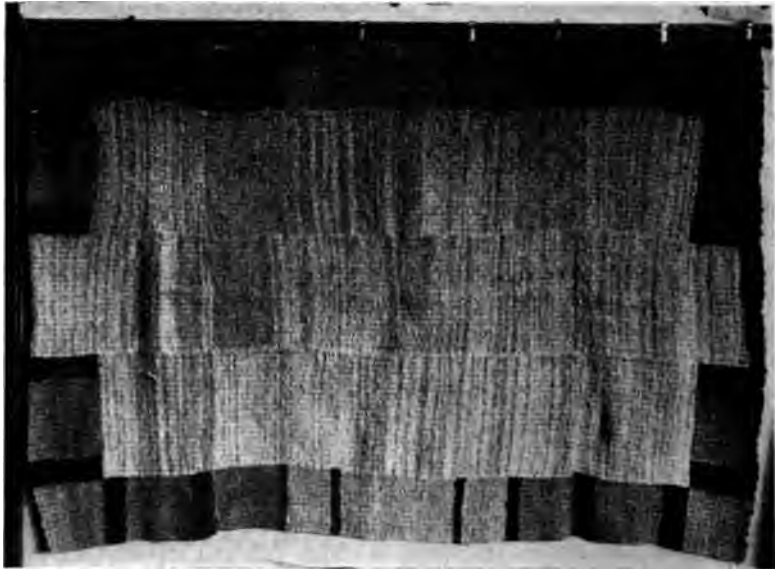
With very much love from your dear friend,

STARR

*If you first burn the copperas, as you would parch coffee, and proceed as above, the color made is a lovely dull orange.

†For this color the yarn was left in the dye over night; otherwise, it would have been tan.

**The warp was an extra-heavy cotton cord, bought of the Thomas Charles Co. We filed it first to soften it and then dipped it into weak walnut dye to make it conspicuous.



29. THE FINISHED RUG

The children's letters do not explain how the parts were put together. After the twenty sections were taken off their respective looms, the question was to connect them so that the seams would not spoil the harmonious, unified effect of the blanket. Finally I hit upon a method of interlacing these pieces that was simple enough for the children to do. Using a long weaving needle, threaded with warp, the child picked up first a wool loop of a border section, then one from a center section, and continued thus, interlacing back and forth down the fifteen-inch length. The wires on the looms had kept the weaving straight, so that there were no drawn or puckered seams when the child pulled his thread taut, and to our great delight, the wool loops slipped loosely and evenly over the lacing thread. As a result the rug had the pleasing appearance of having been woven on one big loom. Frequently, however, one section was woven a little more closely than another; that is, it had more wool threads than did the one to which we were lacing it. If this difference was slight, we now and then picked up two loops instead of one, but if there was a difference of a dozen threads, we ripped out the undesirable fullness. The twenty sections we began with were thus reduced to four, each 42 inches by

15 inches. At this point, my ingenuity failed me, and I sewed the three crosswise seams that united the four sections.

The children had kept this secret for nearly five months, and they felt that such a lovely gift should be fitly presented. One child suggested giving it to Miss Cooke at morning-exercise hour; another said, "No, let's do it when we give our party to the seniors;" but a more thoughtful child objected, saying, "Perhaps the seniors will feel bad because the blanket is not for them." This suggestion of a possible disappointment to another entirely cured their thirst for publicity. So with joyous spirits they carried out the following naïve plan. One child went for Miss Cooke; another met her at the door and blindfolded her; in silence two others guided her to the central chair in a big circle, where the class, on tiptoes, seated themselves. Then a little girl, who had begged this as a special favor, placed the big package, containing both the cover and the precious letters, on Miss Cooke's lap. Still another child loosened the bandage. From every chair a radiant little face beamed upon her, gleefully watching her untie the bundle. Soon each child proudly pointed out his own particular square. Miss Cooke had to read all the letters aloud, and with



30. CLASS WATCHING WOMEN SPIN

childish frankness they corrected her every time she made sly efforts to omit repetitions.

So it was in this happy way that the children finally realized the goal toward which they had worked. But my realization ran deeper still, for along with their weaving the children had caught a slight appreciation of the weaver's art, of its difficulties and possibilities, of some of the joys and sorrows of the primitive peoples who practiced the art. For instance, when the children first began weaving they were greatly hindered by the frequent breaking of their woof or weaving thread. Some colors seemed always breaking. At first I attributed these annoyances to the clumsiness of the weavers, but later, when the more skillful workers also complained, I suggested that we investigate the yarn. The children took up two threads of different colors and compared them. They found there was more twist in one than in the other. The better thread they next compared with a piece of our undyed yarn, and here, too, found a difference in strength and in the amount of twist. They remembered that some colors had been very troublesome to dye and in consequence had been redipped, washed and rinsed over several times. Then they decided that the repeated handling had worn the thread by separating the fibers and destroying the twist. These breaking threads* were causing the trouble.

The following day, a yarn better than carpet-wool was shown the children. They admired its strength and smoothness and wondered how it was made. I told them that long before Christ was born, people knew how to make beautiful threads. I also told them that when she was a young girl my mother had been taught the process and that they too could experiment, if they wished. I gave them a large sheepskin, from which they clipped off bits of wool. Immediately each child became an inventor. Soon an ingenious lad fastened his piece of wool to the drawer handle of his desk and, pulling and twisting with his fingers, produced a thread that would hang together fairly well. Another, failing in this method, tied one end to his pencil and with this as a weight twirled the other end between his palms, thereby surpassing the achievement of the first boy. Forthwith others improvised weights. At this point some primitive spindles were distributed, and their use explained. With one of these a little girl spun a fairly long

*This carpet yarn was bought at the Garden City Educational Co., 110 Wabash Avenue, and cost 60 cents a pound. I do not recommend this quality of material. Another year I got at the same place an excellent yarn at 90 cents a pound. It was, however, very greasy and had to be thoroughly washed before it would take the dye; but the superior quality compensated for the trouble of washing.

thread, but like the poorer ones, this, too, untwisted the moment she laid it on her desk. "I'd try that again," said she, "if the wool wasn't so sticky. I hate the smell of it." A receipt for washing greasy yarn, worked out by a class two years before, was written upon the black-board. Next day the class approved the efforts of the committee which had washed some wool after school. Our Greek janitor next showed the class how to use a pair of old-fashioned hand carders. Again they attempted thread-making. Though pleased with a better result, they were not satisfied. To have them observe skillful work, we visited Hull House Museum, where they watched an Irish and an Italian woman (shown in the accompanying picture) dexterously ply spindle, distaff, and wheel. For the third time the class experimented. At the end of half an hour, a boy dolefully exclaimed, "It looked awful easy yesterday, but I can't work the trick." So with increased respect and admiration for expert skill we ceased our effort.

Meanwhile, the science period had been given over to a study of sheep raising. Miss Larrabee, with whom the children dyed the yarn, and Miss Dewey, who supervised the making of the looms, showed the class lantern slides illustrating various activities observed by them on a modern sheep ranch.

The following letter written to an absent child, after one of these talks, hints at the nature of the information gathered:

Dear Juniata:

We are studying about sheep. Miss Dewey showed us some pictures about sheep. She showed us how they sheared sheep. It took them 3 minutes to shear one sheep. Some men can shear a hundred sheep in a day.

CARL

In order to contrast and broaden their impressions, the children read stories about primitive shepherds; such as the nomadic Bedouins, the Navajo weavers, Persian dyers, Persian rug makers, etc., written by Miss Hall for our second grade. The following lesson, selected from a little group of stories on the shepherd in Greece, reveals the spirit of these reading lessons.

A LOST SHEEP

A shepherd stood on the mountain-side.
He was counting his sheep.
One was gone.
Across the valley was another mountain-side.
Here was another shepherd with his sheep.

The first shepherd called across to him.
 He had to call very loudly and slowly, because it was far away.
 He said, "I have lost a sheep. Is he with you?"
 "I will see," called the other shepherd.
 He counted his sheep.
 There was one too many.
 Now all sheep look very much alike.
 How could he tell which one was not his?
 The sheep all had their heads down, eating.
 The shepherd gave his call.
 All his sheep knew that call.
 They raised their heads.
 But one sheep kept on eating.
 The shepherd shouted, "Yes, I have one strange sheep."
 Then the other shepherd gave his call.
 It floated softly across the valley.
 The strange sheep heard it and lifted its head.
 "He is yours," called the man who was watching.
 Then the other shepherd left his dog to guard his herd.
 He came across the valley and got his lost sheep.

Further to vivify their work in reading and literature, slides were shown of shepherds with flocks ranging the rocky hills of Palestine. These pictures, together with blackboard drawings, copied largely from Knight's "Song of our Syrian Guest," helped build a suitable setting for stories of Abraham, and David and Goliath, which were read to the children by Mr. John Merrill. The class also learned to love and to repeat a number of beautiful little shepherd poems, which they told to the school at morning exercise period, and later some of the loveliest ones they repeated again on commencement day.

Though the rug was woven to make one person happy, the spirit of the undertaking permeated every phase of the class-room work and even beyond, for through the giving of the shepherd songs and poems the grade made its contribution to the larger social life of the school.

NOTE

As so many questions have been asked about the dyeing, it may be helpful to those who are interested, to print the recipes used in the second grade this year. We are also printing some of the home experiments. These were done upon the children's own initiative and before the class-room dyeing was begun, the motive being to see how many pretty colors they could make for the rugs they were to weave for the kindergarten. These experiments show how the interest in last year's

weaving done by these children in the first grade carried over and gave a basis for this year's work, which takes them a step further by using mordants and a greater variety of vegetable dyes. Some of these experiments are repetitions of work done in the first grade, while others are wholly original.

HOME EXPERIMENTS

I dyed with preserved strawberries, but the color did not take. I boiled the cloth in the berries fifteen minutes. I dyed another piece of cloth in beets, but the color was not good. After the beets had boiled I put in the cotton cloth and some salt.

I made an experiment with jelly tablets that come in each box of Knox's gelatine. First I melted the pellet in hot water and then put in a piece of white cotton cloth. Then, after it had boiled five minutes I put in some salt. It made a pretty red. When I washed it, why, it faded to pink.

MARY

I made an experiment with onion skins. I boiled it five minutes. It turned brown.

JOHN

I experimented with grape juice. I put some woolen yarn in a pan. It turned purple. Then I washed it. But it faded.

JACK

Red

- 1 teaspoon damsons
- 1 cup water
- 1 lump washing soda

Boil about ten minutes. Then add wool yarn. Boil about one-half hour. Wash it, and it will fade.

Burnt Sienna

- 2 teaspoons blackberry jelly
- 1 cup water
- 1 lump washing soda

Boil about ten minutes. Then add wool yarn. Boil one hour. Wash until water is clear. It will not fade.

Gray

- 1 handful catkins
- 4 tablespoons water

Boil about ten minutes. Then add cotton material. Boil until water is used up. It will be a dirty gray. I did not wash it because it was so ugly.

ROBERTA

We are making rugs. I made some brown with tea and salt. I boiled it for five minutes. Then I left it all night on the stove. Then I brought it to school and washed it. And it didn't fade.

JANET

We are making experiments. I tried to make a brown dye with lavender leaves. It made a light yellow. I took one glass of leaves. I had three glasses of water. I put one teaspoonful of pepper to set it. It boiled fifteen minutes. It made a light gray.

I tried to make another brown with some sandal wood. I took two tablespoonfuls of sandal wood and a glass of hot water. I left the cotton cloth in the dye over night. The color was pink. It did not fade.

JACK

CLASS-ROOM EXPERIMENTS

Blue Dye

1 oz. indigo

$\frac{1}{2}$ oz. zinc dust

$\frac{1}{2}$ oz. lime

I ground the indigo. Then we sifted it. Then we added the zinc dust and one gallon of cold water. We added the lime. The lime was mixed with a little warm water. Then we let it stand 24 hours. We stirred it every little once in a while and skimmed off the scum. We washed the yarn. Then we dipped it in the dye until it was dark enough. Then we hung it up to dry. Then Miss Larrabee washed it.

ROBERTA

Yellow

1 tablespoon copperas

1 quart warm water

First wash the yarn in warm soapy water. Then dip yarn in lye water. Wring yarn well. Then dip yarn in copperas water. Wring yarn well. Then dip it in lye water again. Wring yarn well. Then let the yarn dry, and it turns yellow.

LOUISE

Orange

We burnt two tablespoonfuls of copperas. We had two pans. One had one quart of water. Another had one quart of lye water. Then we put our burnt copperas into the first pan of water. We washed our yarn and then put it in the lye water, and it turned yellow. Afterwards we put it in the copperas, and it turned green. We hung it up, and it turned orange.

ALICIA

Red

2 cups madder

$\frac{1}{4}$ cup of alum

$\frac{1}{4}$ cup of cream of tartar

$7\frac{1}{2}$ quarts of water

1 pound of cotton yarn

Wash yarn in soapy water and boil it one hour. Then wring water from yarn and put it into the pan of alum and cream of tartar and two quarts of water. Boil one hour. Then put the madder into the kettle of water. When the dye is hot, put in the yarn and keep it below boiling

for fifty minutes. Boil hard for fifteen or twenty minutes. Then hang yarn up and wash it after it is dry.

JACK

Green

We took one-quarter pound of indigo blue yarn. We dipped it in the yellow dye. We dipped it in the dye about eleven times. It turned greener and greener. We hung it up.

TOMMY

Green

- 1¼ oz. fustic chips
- ¾ oz. logwood chips
- 2 tablespoons copper sulphate
- 1 lb. cotton yarn

We put the logwood, the copper sulphate, the fustic chips in a bag. We put the bag in about two gallons of water. We boiled the yarn one hour in soapy water before we put it in the dye. We boiled it in the dye until it got dark green. We let it dry over night. Then we washed it. It turned a lighter green.

FREDERICK

Brown

First of all I helped Jack measure two pints of walnut hulls. Then we tied the hulls in a bag. We got the water. I got two quarts, and Jack got two quarts, and that made one gallon. We put the bag in the water, and the walnut shells made the water turn brown. When the water was dark brown we put in the yarn. We boiled the yarn one hour. It stayed over night in the dye.

JESSICA

Turkey Red

- 1 tablespoonful diamond dye
- ½ tablespoon baking soda
- 2 quarts water
- 5 ounces yarn

We weighed our yarn, and it weighed five ounces. Then we washed it. We first wet our dye. Then we poured some hot water on the dye and stirred it. We strained it through cloth. Then we poured another quart of water on it. Then we put in our yarn. Then we boiled it a half hour, and it turned red.

ALICIA

Our experience has shown us that more satisfactory results are to be obtained from the vegetable dyes if one is dyeing wool; if cotton, one may get soft, pretty shades, but the results are less pleasing to the children. In order to satisfy their love for strong colors, we often use the aniline dyes. We recommend the use of these because of the difficulty of obtaining the vegetable dyes and also because one is more sure of good results and a wider range of color.

THE SOCIAL APPLICATION OF PAINTING AND DRAWING

Art is the true and full expression of the soul in forms of beauty. The highest art is the result of a perfect surrender to motive. With the little children the expression is more or less concerned with self, but the child's horizon enlarges; and as he gains experience and images, if the conditions are right (i. e., if the environment is rich enough to stimulate his emotions and beautiful enough to create ideals), the naturally artistic child will progress in his expression beyond the stage of self-interest and group-interest, even beyond that wider community-interest, where most of his mates find their limit, until finally his expression embodies the highest vision in an ideal of universal interest, which differentiates the great artist from the rest of humanity.

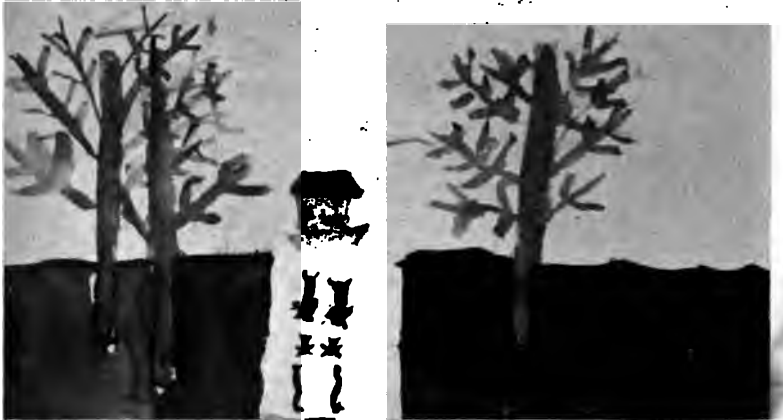
The opportunity to discover a great artist in the making is an opportunity ever before the teacher. America, so far, has not called upon her children for true and beautiful self-expression, and therefore she has produced few great artists.

The purposes of art education are to reveal the soul; to foster the child's enjoyment of nature and the great works of art; to cultivate his taste, which will enable him to judge of artistic values in art; and to teach him to be a creator of art.

The child is stimulated by the beautiful or interesting object he is studying and visualizing. His motive is to express his impression. Miss Puffer, who has the chair of psychology at Wellesley, in her book called "The Psychology of Beauty," says: "The esthetic experience is caused by the beautiful object, but the beautiful object itself is caused by the possibility of the esthetic experience." A little child may have this esthetic experience in a degree. So far as he can objectify his ideal, his expression is art. The little child's expression cannot be understood or appreciated by people who are looking for finished, conventional results. They cannot realize that the crude daub or outline may be the child's full expression at the time, and that it is vital and necessary to him.



81-82. THREE BILLY GOATS GRUFF



33. THE ANIMALS GOING INTO THE ARK



34. THE LAD THAT WENT TO THE NORTH WIND

The new expressions of beauty made by such men as Redon and Matisse should make us grown-ups pause before we criticize the spontaneous expression of our little children, who, like these men, are not hampered by rules and conventions. These men are great artists, and, after much study and experience and work in the accepted and conventional methods of expression, they have turned their backs on the traditional and accepted style, that they might be free to receive visions and to express themselves fully and adequately. They have truly found themselves anew and have attempted to show to us their visions of beauty, line, and movement in naïve simplicity and originality. Let us then not be too hasty in criticising the work of a child because he has not yet found and does not follow the rules which these artists have discarded.

The child's power is constantly developing and growing under the demand which art makes for expression. Consequently the little children's work should not be kept long before them. It should be destroyed or put out of their sight as soon as its use is over. Their images should be made clearer at times by seeing the teacher draw or paint before them, and they should also see some really beautiful pictures, showing how other people have expressed themselves on the same or similar subjects. They will not copy, but they will get an impression and adapt it to their needs.

During the year the first-grade children needed curtains for their dressing-room door. A pair of ring doves live in the room, and the children care for them and love them. Therefore for the decoration of the curtains they used drawings of doves, arranged in a border at the top. Some of their first sketches on the blackboard had four legs and heads and bills unrecognizable, but these images were quickly improved by a suggestion that they go and look at the doves and find out about these things. No further direction was necessary. The children hurried to the cage, made the observations they needed, and eagerly made corrections. The final drawings which we used were not perfect in form, of course, and could not be if they were the child's own work; but the form was as good for each one as was possible for him to make at this time. To insist upon perfection or to go one step too far in this demand would crush out the spontaneity. On the other hand, it is the teacher's business not to allow the child often to repeat the same mistakes.



35. FIRST GRADE CURTAIN AND STENCILS



36. SECOND GRADE PILLOW

The second-grade children wished to make something for Miss Cooke's room. After visiting the room and deciding to weave a pillow for the couch on their own looms, they chose the colors and planned the work. They decided to use brown and green, because those colors are used on the walls in the room. The children chose to use chickens as the unit of the design, because they take care of the school chickens and know much about them. The drawings made from memory were interesting in form and action. The two sides of the pillow were woven separately and sewed together. Before this work was begun, the children had the opportunity of seeing some Navajo rugs and were

much interested in the way the patterns were woven in and thought they might try to do theirs in the same way.

To cultivate motive is the teacher's aim in art as it is in all other study. A child's motive at first is primarily taken up with the immediate activity. This develops into an eagerness to tell something to others and a desire to work with others. The older children share the motive with the teacher, and the work grows in power and quality as the motive is adequately and fully expressed. In the early grades most of the children come to us with vague, undefined images and experiences, and they have little or no knowledge of the tools used in expression.

The medium of water colors gives the children great freedom. They soon learn to control the pressure of the brush and find out what effects they can get. The colored crayons are not so good, since they are poor in color and are hard and small and are necessarily held in a tight, cramped way by the fingers; therefore, the results must be unsatisfactory. The pupils have to get acquainted with the brush, colors, scissors, and the blackboard. I believe the large free work is the best for little children. Consequently, we use pads 20 x 14 inches and brushes number 4. In this way the colored pictures can be made as large as those on the blackboard. At first a great deal of blackboard work is desirable, but color should be used often, because little children respond to color impressions much better than to form, and through the use of color, a child finds closer observation necessary, and his sense of both color and form develops rapidly through use. A child's work should usually not be criticized by adults except in the form of constructive suggestion, but the children should be led to see whether the meaning is clear. A child understands another child's criticism, and each is eager to make his expression adequate. In this way the children gradually develop keener observation and grow in skill. In these early pictures action is a thing they love and never hesitate to express. This can be encouraged by dramatizing a story before asking the children to make pictures of it.

In the middle grades the art expression is less spontaneous and less truthful to the pupil's own esthetic impressions. The reason for this is that he is less satisfied with his own efforts; his critical sense has developed, and he is more influenced by other children's expression (often that of his immediate neighbors). He wishes to be like others and tries to make his expression conform to the ideas and thoughts of



37. SHOWING INFLUENCE OF NEIGHBOR'S WORK

others. The main cause for this critical feeling, or feeling of self-dissatisfaction, is that the child's technique has not kept up to his ideals, and this is because the schools do not give children sufficient opportunity for art expression. When the emphasis is put on the acquiring of technical skill in these grades, the spirit and beauty are often lost, and consequently the pupils' work is not true self-expression. There may be an advance in mere skill, but the work has no esthetic value as art expression. This emphasis upon skill usually begins to be evident in the fifth grade; sometimes earlier. After this the children are more or less hampered, until, with much training, spontaneity and real expression become again supreme. Colonel Parker says: "All forms of expression are adapted to the needs of the soul at every step. They grow with thought, conform to thought, and are therefore genuine, adequate means of expression."

The great aim in all of the art expression is to inspire the pupil to assimilate what he can of beauty in nature and life and to transform these impressions into visions or ideas and to give the pupil opportunity for creative individual expression—to do this repeatedly, improving and making the expression as full, satisfactory, and beautiful as possible. The teacher should have wisdom and sympathy sufficient to guide each child and to know when and how to determine what is the best expression possible at the time being. The pupils must know something about values in line, tone, and color. Thoughtless effort is not art expression. The pupils must understand something of the beauty of arrangement. Then, again, there may be a danger of esthetics being carried too far, beyond the power of the real appreciation by the pupils, which results in refined but often worthless lines and tones, in affectation and sentimentality. This power to express cannot be given to the child nor easily gained by him alone, but it can be developed in many children by the right training. The reaction upon the individual of his own art expression in contrast with that of a piece of cut-and-dried drawing without thought, should receive great attention and consideration in art education. The reaction of true art expression will always be inspiring and joyful, a real satisfaction. It cannot fail if it is an adequate expression, technically and spiritually. But there will always be pupils whose habits of work are bad and have been so for a long time, so that they themselves are not able to discriminate between good and bad. Habits are slow of growth. This can



38-39. SHOWING INTEREST IN DETAILS

be helped only by showing the child what is good and by making a continuous demand for expression which appeals to the child as worth while. The motive will arouse effort, will cause him to study, compare, and discriminate; and these processes will gradually result in beauty of expression.

In the grades from the third through the sixth, the children gradually gain in skill and appreciation, and their expressions are much more full of interest in detail and show keener and greater discrimination in color values. The proportion of people to trees, houses, and animals, is usually noticed first and expressed in the third grade. And in the fourth many of the children begin to express their appreciation of aerial perspective, and their work shows more variety and delicacy. A little later follows the demand for linear perspective. In the fifth and sixth grades the children are critical of form, proportion, and details, in their own and others' work. They are much interested in details. As suggested before, they are decidedly in a realistic stage.

In the seventh and eighth grades the pupils also enjoy realism. Their interest in detail is still strong. They enjoy working from objects and from nature. The seventh-grade printing and hand-lettering and illumination satisfies this demand and develops skill and taste as perhaps nothing else could do at this time. In the eighth grade the pupils enjoy illustrating historical subjects for use in plays or morning exercises, and they look up with great interest the exact costumes, weapons, and implements of the period they are studying. This is an opportunity to get further skill and also to study accurate background.

In the first grade of the high school the entire year is given to the study of design. There are many real demands made by the school for designs, and the following illustrations show some of the interesting social motives for this work. The pupils are always eager to attempt a new problem; such as designs for the school paper and school programs* and for different articles made in the shops. Practically all of the designs are utilized in fulfilling some social demand for the school.

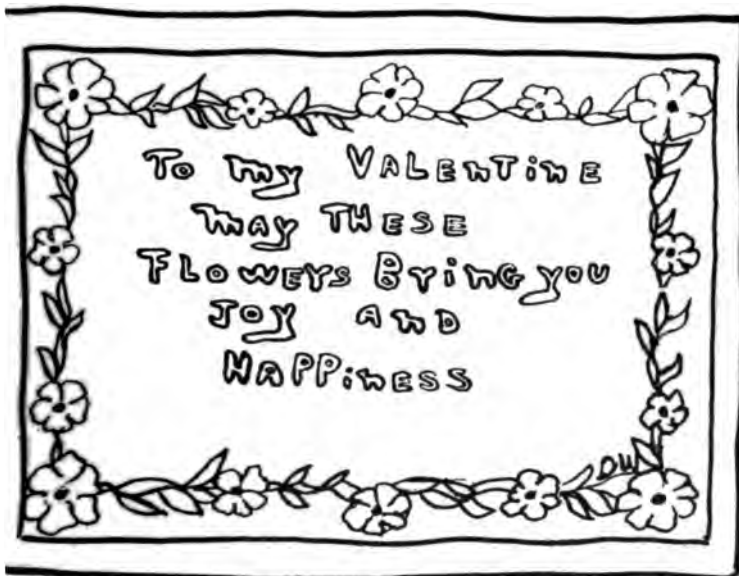
This study of design includes different principles: subordination, variation, opposition, balance, and repetition. Subordination in art expression is the relation of the parts of the design or of the less important parts to the more important parts. It includes the principles

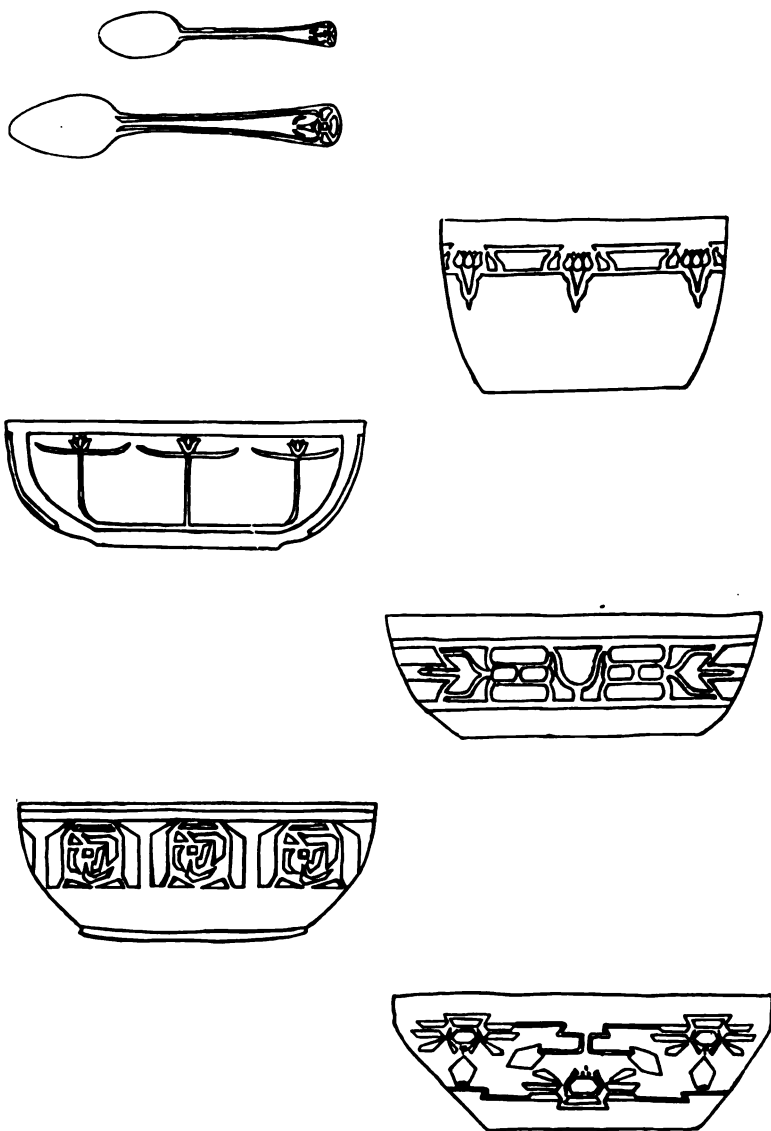
*The tailpieces used in this book were made by pupils of the eighth grade.



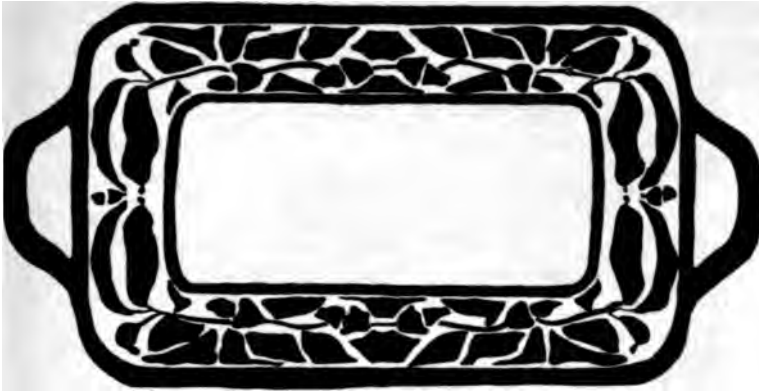


41. COVER DESIGN FOR SCHOOL PAPER





44. ORIGINAL DESIGNS FOR SHOP WORK



45. DESIGN FOR TRAY TO BE MADE IN SHOP

variation or transition and of opposition, which means severity and **ise**, not merely right angles; of balance, which has to do with the **nstructive** stability and unity of the expression; and of repetition, or **e** **rhythmical** arrangement of lines, spaces, and tones. A harmonious **sign** means the consideration of all of these principles.

As a rule, the tenth, eleventh, and twelfth grades wish to express **ne** idea or illustrate some poem or story: in other words, to compose. **ey** show much feeling for design in their desire to use the knowl-**ge** and creative power in some complete expression. The tenth-grade **ls** wished to decorate the first-grade room walls. They decided to **e** the familiar Mother Goose rhymes as the subject. In order to do **s** well enough, they studied and sketched from life and composed **e** designs many times, until they were **satisfied** with the arrangement **d** positions. Then these sketches had to be enlarged to about one-**lf** life size, and the color planned. The lighting, as well as the color **ed** on the walls and woodwork, was considered, and sketches were **ide** using different schemes of color. At last the girls decided to use **gray-green** background with gray-blue, browns, and a bit of orange in **e** tie and the candle flame of Jack-Be-Nimble. We used a prepared **per** and fresco colors to do the work. These panels are to be ar-**nged** on one side of the room as a frieze.

The question of a school uniform was the subject of many dis-**ussions** in several of the grade meetings of parents and teachers. **he** children were much interested, and very decided in their opinions **ainst** the idea. The eighth-grade girls were eager to find out why



46. CHARCOAL SKETCH BY HIGH SCHOOL PUPIL



47. LITTLE MISS MUFFET—DECORATION FOR FIRST GRADE WALL.

individuality in dress was desirable. We gave the art time to this day and discussion for four weeks in this grade. The children made sketches illustrating the good and bad points in costume. The eleventh-grade girls took up the study later and with their added experience and skill carried the work further. The two grades took a morning exercise period to tell the school what they had learned on this subject their conclusions and the reasons. The following is an account of it.

Sarah. The girls of the eleventh and eighth grades have been studying about good taste in dress during their art periods. I am going to read something from Colonel Parker to you. Colonel Parker makes no mention of dress, but we feel that everything he says in the quotation about individuality is just as applicable to beautiful costume as any other form of art: "There are no typical forms in nature, the great storehouse of art studies, and the realm of the beautiful; here every shape deviates from perfect form; it is irregular and individual; expresses a definite character which differs from all other characters; it is art to find that character and express it." "The theory of con-



48. LITTLE MISS MUFFET—DECORATION FOR FIRST GRADE WALL

centration brings art home to every child; makes it an incomparable means of personal education; discloses hidden springs of beauty; turns its vast influence upon intellectual power; cultivates the most exalted emotions and noblest motives; leads to an absorbing love of the beautiful in nature and art; unites it with all other conditions of educational work; but, best of all, it takes art from its isolation and renders it a common good."

Helen. During the winter, at several meetings of the parents, a uniform for the school was discussed. The eighth grade was very much opposed to a uniform, but were unable to discuss or argue the subject, so we asked Miss Clements if we might study about costumes and call it good taste in dress. We believe there are three important points in a good costume—simplicity, durability, and suitability. We cannot say much about durability of dress without samples to show you, but we know that a good quality is desirable, and the texture of the cloth has an effect upon the beauty of the costume. For a school dress we should



. **LITTLE JACK HORNER—DECORATION FOR FIRST GRADE WALL**

the materials that clean or launder well. The color should always harmonize with the color of the individual's hair, eyes, and complexion. The same colors or combinations do not look the same on all people. A uniform would not look well for all, because people are not built the same. This is a very strong point against uniforms. We believe that one should choose a style and the colors which are becoming and suitable and should know how to do so for different occasions, as school, home, or street. A dress should be cut on simple lines, and it should be free, so that the wearer's actions are not limited to the cut of the dress. It is of as much importance that the principles of art be applied to the furnishing of a house. If we had a school uniform we would have no choice in dress, and that is another strong point against uniforms. Since all of our teaching tends toward the cultivation of individuality, why should we have our clothes chosen for us?

Margaret. As Helen has said, the colors are very important in choosing a costume. They should be harmonious, not only with the individual, but with each other. You can tell if the colors are harmonious in this way. If you choose brown as your basic color, the other colors

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lines, masses, or colors, to the important part. This dress (pointing to colored sketch) is an example of subordination, because the colors are so related. You might almost say that the other principles are included in subordination. We often confuse repetition with subordination itself. A good example of repetition of lines is in this sketch (showing the repetition of these lines in waist and overskirt). Repetition is a careful and rhythmical arrangement of lines and spaces and tones, shown in the lines of costume or sometimes in the repetition in trimming or design in embroideries. Balance is another important principle, but it is more often felt than actually seen. A good example of this would be the balancing of the amount of trimming or draping on the skirt with that of the waist. You must also have a balance of colors and tones. Opposition is another principle. It is really the most difficult to explain. An example of this would be the use of lines on a waist, as in this drawing, not lines running at right angles, as is the ordinary understanding of the principle. A harmonious costume must have all of these principles applied.

Bertha. It is just as essential to know about bad lines as it is to know about good lines, and some people who have perhaps the correct fundamental ideas of dress ruin the effect by some incorrect line or some disagreeable feature. It is very well illustrated in the outline we have here. This dress as it is here is graceful, except for the skirt, which is so narrow that it is neither useful nor ornamental. By carrying down the lines of the overskirt in this way (sketching on blackboard) and making it fuller, you have a much more pleasing effect, and the entire costume is much better than it was before. In the other sketch we show the neck of a shirtwaist. This is very bad, because there is a conglomeration of lines, and the sleeve also is a bad length. Now by erasing these poor lines and changing the outline (on the blackboard) and sketching in a more circular neck and changing the length of the sleeves, we have a more pleasing effect, and the whole waist is improved.

People also make the mistake of thinking that because a costume is beautiful on one person, it will look just as beautiful on another, regardless of individual figure. Here are two sketches which illustrate that point very well. This costume on a slender person is attractive, with cross lines at the waist which give the desired width. It makes a pretty costume, while on the stout person it is most unbecoming, because it exaggerates width, which is the point the costume should minimize.

Enid. We also studied what a school dress should be, and we found that a school dress should be suitable, durable, and beautiful. Now by beautiful dress we mean a dress that has a harmonious color scheme and good lines. These two sketches show what we think the correct school dress should be. This sketch shows an appropriate party dress for school. We believe that every girl should express taste in her clothes and should have experience in choosing when young. Some of the magazines have published interesting articles on dress. The national convention of the Women's Club which met in Chicago recently had a division given to the discussion of good taste in dress, and the *Craftsman* has

published a series of articles on good dressing, so you see there are other people thinking about the same thing.

We do not believe in a uniform for the Parker School. Everything here tends towards cultivating our individuality, and we think that our taste in dress certainly brings out our individuality and that it should be cultivated by having individual, suitable costumes.

When one is comfortably and suitably clothed, he is not conscious of his apparel and can give his whole thought to other things.

To be of value in education, the art expression cannot be isolated from the child's experience. Modeling, painting, and drawing—each mode of expression—must be used to enrich or make clearer the images in the subjects studied, and if this medium is daily used to make the work more beautiful and more interesting, no time need be spent on drill. All the drill and technique would be gained as a necessity under the stimulus of thought. If this were done, understood, and appreciated, literature, history, geography, science, and ancient and modern languages, would all be benefited by the ministry of art.

All through the grades there has been growth in the social motive in expression and also in general power and courage to attempt new problems and sustain them through the necessary drudgery. The social motive in a child develops gradually through the demands made upon him. As I have said before, the child usually goes through different stages in his esthetic expression, and he may reach the place where he is able to express himself adequately; in other words, often a class has had a motive big enough to hold over and give courage and hope through all kinds of drudgery until a final self-satisfying production has been finished, until the big social demand has been answered. The feeling of self-satisfaction is justified and balanced by the feeling of having fulfilled a useful part in the community.

PREFACE

child and his more natural environment. Several articles in this volume of the Year Book show how the school provides opportunities for observation, for personal contact with actual materials, for individual experiencing through which adequate mental images are obtained and the basis for future work laid.

Another and equally important use of concrete experience is found in constructive activities and projects where the application and use of knowledge already gained is demanded. The criticism of schools for their failure to give practical instruction is partly due to the obsolete and unpractical subject-matter which clings tenaciously to textbooks and courses of study, and also in large measure to the lack of opportunity to use in concrete ways knowledge which is directly useful and susceptible of immediate application to problems in the pupil's home and school life. This shortcoming may also be laid at the door of that false conception of the object of education as mere knowledge. Such a conception defeats its own end, as knowledge is defined as past experience organized to meet the demands and problems of new experience. Instruction is not complete until application of facts learned has been made and their usefulness demonstrated by the solution of problems of a practical character which develop out of the study itself and which possess a powerful appeal to the pupil. A number of articles describe activities of this sort, where the pupil utilizes the information he has acquired in the solution of real and vital problems.

No attempt is made in this volume to state in any complete way the basic educational theory concerning the place of concrete experience in school work. Educators are so well agreed upon the importance of concrete experience and teachers on every hand so actively engaged in improving practice in this regard that any restatement of what is generally accepted is unnecessary. Rather, it is the hope of the faculty that the work described, selected as it is from many grades and departments, may show forth in some degree both theory and practice, and may be of some help to other teachers who are attempting to make their teaching more effective and their pupils more efficient through the introduction into the schools of a large measure of concrete experience.

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MENTAL IMAGERY IN GEOGRAPHY

What is the origin of our mental imagery of the world as a sphere? Do we get it from the earth itself? The view on a large flat plain, or on an extended water surface where the shore line is out of sight, has, it is true, a visible circular horizon. If, however, we seek to extend the view by gazing from a mountain top, or from an aeroplane, even at a height of two or three miles, we see nothing that looks to the eye even remotely like a sphere. Although we have an enlarged circular horizon, yet we do not get far enough away from the earth to see its real shape. In other words, we cannot include enough of the earth in our view to see that it is a sphere.

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If, further, we circumnavigate the globe, do we thereby get a sense-impression of a round earth? We may, indeed, by this experience, increase tremendously the vividness and the trustworthiness of our mental image of a spherical earth. For example, nothing else will so much aid us in thinking correctly of the huge size of the planet. But even that much is due entirely to an effort of thought in connecting our experience of travel with our preconceived mental image of a sphere. Columbus, with an exceedingly wide experience on the ocean, concluded that the earth was pear-shaped.

We are not here concerned with the proof that the earth is round, but with the question whether we can get a sense-impression of a round earth from the earth itself.

If we observe an eclipse of the moon, we see the shadow of the round earth pass over the disk of the moon. We see, it is true, that the shadow is circular in cross-section. Does that give us an image of the spherical earth?

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concrete experience must be rich and varied if his mental advancement is to be full and free. One educator has said :

"Concrete experience is essential to the thought processes, to the interpretation of the thought of others, and to the enrichment of one's own activities."

It is not sufficient that our teaching be based upon contact with concrete materials. Experience with materials, however concrete, is valueless unless it has appreciable significance in the lives of the pupils. Organic connection must be made between the pupil's mind and the facts of his experience, and this connection can be made only by the pupil himself. Unless we as teachers put the emphasis on motive and not on subject-matter, we cannot expect the pupil to make this connection, nor can we expect to develop in him any large measure of initiative, of power, of inspiration.

The curricula of our schools have reached the limit of expansion, and the possibility of increasing the time to be devoted to education offers but slight hope for reducing the pressure. In fact, the tendency is to reduce rather than expand the number of years allotted to instruction. The value of each of the available hours must be increased by the elimination of the formal, the useless, the traditional, the merely desirable, the merely informational, and by the retention of the useful and essential. The connection between the pupil's experience and the subject-matter based thereon must be constantly maintained. The problems growing out of experience must be real, and the participation of the pupil in them genuine, if he is to be actuated by that impelling motive which results in growth and a yet higher motive.

Colonel Parker says: "The absolute dependence of the imagination and the powers of apperception upon those concepts which come into the mind by observation, is probably the best known and the most undeniable fact in psychology." "Strength of apperception depends mainly, if not wholly, upon the clear and vivid concepts gained by observation." "The student must have the means, the mental power, to judge for himself, and the bases of that judgment are the products of his own observation." Observation, experiment, and other methods of contact with real materials, train the senses and result in the clear mental images and concepts so essential to development. More and more the school is called upon to make good the deficiency in sense-training formerly supplied by the home life of the

larger share of careful study in order to provide these elementary mental images of geography, since these latter cannot be obtained from the study and observation of the great outdoors itself.

It is a well-known fact, moreover, that a large proportion of our maps and models are distorted reproductions of the real things. For instance, the projection of the spherical earth on to a flat map necessarily distorts its shape. All the methods of projection are struggles to minimize an inevitable difficulty. The Mercator projection for world maps is the worst distortion in shape that is used. The flat map on any possible projection, for even so large a portion of the earth's surface as a continent, is a serious distortion. Hence, flat maps should be limited to areas at least as small as the United States, in order to preserve, approximately, the actual shape.

Moreover, teachers should be very suspicious of the value of the false images children obtain from working out exaggerated relief on sand-tables or putty maps. It is usually pleaded for these that it has been explained to the pupils that the relief is exaggerated, since it would be too slight to represent at all on the same scale as is used for horizontal distances. Distorted mental images thus obtained are, nevertheless, not "corrected" by such verbal explanation, and persist, since they cannot be tested by comparison with reality itself. For these small models themselves are the source of our mental images inasmuch as the actual world features are inaccessible to our observation on any possible scale that would enable us to see them. Hence our false distortions are not recognized as false, since we have nothing true to compare them with. Even learned geographers have sometimes defended these distortions, on the ground that they represent the earth as it really looks to us at close range. The heights of mountains, they say, seem exaggerated in comparison with horizontal distances in a landscape. The slope of a hill seems much steeper than it really is when measured. Nearly every one draws a mountain far steeper than any mountain-slope usually is. On the other hand, however, I believe the truth to be simply that our distorted relief models and exaggerated diagrams have caused these misconceptions of the mountain-slope and heights that have, in turn, been urged as a reason for continuing the use of the distortions.

On the same ground I question the wisdom of the exaggeration of any physical features whatever in a map or model. In this connection it is to be recalled that practically all our school maps at present

greatly confuse the images they present by the mass of names printed on them and grossly misrepresent the width, shape, and number of rivers, the number and the size of railroad tracks, the size and shape of cities, and the prominence of political boundaries; at the same time, they usually fail to bring out the facts of soil, geology, wooded and farming areas, industries, trade-routes, etc., that are closely connected with the geographical mental image that we should get from a map. Of course, special maps must be used to show separate features in detail, but still it is very desirable also to combine in one map, large enough to avoid confusion, every sort of characteristic possible to assemble that is intrinsically necessary to the understanding of the life of the inhabitants of the region. A large detailed map with a multiplicity of data may indeed be so arranged as not to be confusing if prominence be given to large things, and minor things be kept in proper subordination. In general, everything should be on the scale of the map. Instead of making names so large as to be read across the room, I would have the names on a key map only, or so small on the other map that they could be seen only close at hand, as signs on buildings are seen. I would have three series of maps; namely, first, detailed maps to show specialized features with names; second, maps on a very large scale without names, or with only the smallest details named in very fine capitals, these being planned more as bird's-eye views, with everything in proper proportion, to be viewed close at hand for detail and at a distance for the general view and for larger features; and third, key-maps with names for reference, much as our usual maps now have the names on them.

What part of our mental imagery, on the other hand, can be traced to direct sense-impression of the actual world about us?

First, the landscape as we travel over the surface of the earth is undoubtedly direct sense-impression of the real world. It should, however, always be interpreted by maps. An observer with a map can see more things and note more relations than one without, because by the map he perceives at once whence and whither roads lead or streams flow. Thus he sees beyond the mountains or the woods that obstruct the view, and corrects the mistaken appearances due to the foreshortening of objects. In this way the map at once gives an exactness to his observation that even months of study without a map could not give. We must, therefore, never forget that, while it is undoubtedly true that the first-hand study of the surface of the earth is indispensable

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stretch of country visible from one point of view, so it is very desirable that minor outlook points be visited for the view of smaller areas. The view from the Woolworth building in New York or the City Hall in Philadelphia or the Bromo-Seltzer Tower in Baltimore or the Washington Monument in Washington, D. C., or the Eiffel Tower in Paris, gives a sense-impression of a great city that cannot be obtained in any other way. Such views bring things into association because they are combined in one observation. For other areas, however, we must think the thousands of things in question into relation by the study of maps. The mental imagery of a map is the concrete basis of our thinking these thousands of relations among the hundreds and thousands of facts represented on a map.

If, on the one hand, the earth is too near for direct study without maps, so, on the other hand, the stars and planets are too far away for study without models. Thousands of observations are necessary to collect the facts expressed in a model of the solar system. The model shows the relation of the facts directly to the senses. In the heavens, however, those relations escape our observation because of the size and distance of the objects and the limitation of our sight to but a small part of the heavens at any one time. It helps, therefore, our conception of the daily rotation of the sky about the earth if we step into the Atwood Celestial Sphere* and see that model of the heavens rotate in five minutes.

When we consider how little of the fundamental imagery of geography can be had merely from direct observation on trips, excursions, travels, bird's-eye views from outlook points, or observation of the heavenly bodies, we are likely to be more duly impressed with the indispensable role played by maps and models in the creation of geographical imagery.

In our school, therefore, we supplement our excursions and field-trips with not only ordinary maps, but floor maps. In our fifth-grade room the floor is covered with plain linoleum in which is carved a map of America north of the equator. The scale is twenty miles to an inch, for convenience in measurements. The rivers are tooled out of the linoleum by small gouges. The cities are represented by brass shapes nailed on. The mountains are also of metal, while the pointed tack-heads symbolize the heights of mountain peaks. There

*The Atwood Celestial Sphere at the Chicago Academy of Sciences is a great hollow globe into which one enters to see the apparent rotation of the heavens about the earth.



THE FLOOR MAP LOOKING NORTH FROM THE GULF OF MEXICO

are no names, but literally thousands of facts are represented. The relations of these facts to one another are better represented than an ordinary wall map, because: (1) The map is ten times as large as any ordinary wall map. (2) It lies in conformity with the position of the compass. North on the map is north on the earth out of the window. (3) The pupils can walk over the map, thus getting the muscular sense and sense of direction associated with the regions on the map. They can step from state to state, can walk from New York to California, or from Alaska to Panama, and get an orientation that is impossible from a map that is merely looked at on the wall. (4) Standing at Chicago on this map, the pupil has spread out around him a *direction key* to all North America. He has but to point in the direction of New York, Hudson Bay, San Francisco, Cuba, Panama, South America, or the Bermudas on the map, and further out over the horizon in the real world lie any or all of these in precisely the same direction as he is pointing. (5) The floor is where children naturally love to play, and hence on the floor map. It lends itself to numerous forms of play, permitting a whole class to participate at once in active exercises on its surface. Thus rail and water transportation routes, with toy trains and boats, make the real appeal of sense-impression. The corn, wheat, and cotton areas, forest areas, geological formations, mining districts, manufacturing cities, etc., are chalked out by pupils from reference maps, and for history the routes of explorers and areas of claims and treaty boundaries are similarly marked. Colored cords on pins, stuck in the map, are also used to show explorers' routes, ice-sheet edge, snow-sheet extent from week to week, isobars, or storm areas. The weather of the United States has been represented by the children, each taking a station—a boy for cloudy weather and a girl for fair—standing to face the direction in which the wind was blowing, as reported on the United States daily weather map. A standard marked "High" or "Low" is placed over the area around which centers the anticyclone or the cyclonic storm. The ascending spiral bringing rain or snow, and the descending spiral bringing fair weather, may actually be pictured through the senses and made clear to a fifth or sixth grade pupil. We sometimes cut out circular discs to scale, to represent state areas or population of states or cities, the number of bushels of wheat, corn, or other crops produced in each state, and then have the fun of laying them out on the proper part of the map, thus giving a sense of relative values.



THE SCHOOL GARDEN AT CALIFORNIA, PENNSYLVANIA, LAID OUT AS A MAP OF THE UNITED STATES

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This sort of motor sense-impression is very different from that derived from little book maps held in the hand, or from maps hanging on the wall, where all sense-impression associated with a map is false and has to be laboriously corrected by reasoning from memory images. Most of these false associations of maps are never considered by teachers, and few children ever consciously correct sense-impression by memory images.

Far greater interest attaches to the large map, not only because it is clearer but because the children can play with it and on it. Even a little boy in the lowest primary grade learned the states by hunting apples hidden in the different states. The children readily invented games to play on the map, and found an added zest in the freedom of learning. They played hide-and-go-seek, follow-the-leader, or located cities, mountains, rivers, etc.

The added clearness was very forcibly shown by the many questions the children asked about details of the large map that never would have occurred to them in even the most detailed study of book maps.

A large map of the United States in relief, laid out as a park with some attention to the growing crops and mountain flora, with actual water in the great lakes and the Mississippi River, with the cities marked in cast iron models, as they are in that charming model of Palestine at Chautauqua, New York, would teach more geography than all the other apparatus ever made, and while not too expensive for any city of over fifty thousand people, would make any such park a world-famous spot until such models become common in other large cities. It should commend itself even to landscape gardeners as far to be preferred to formal geometrical gardening, just as pictures are preferable to wall-paper designs.

The apparatus, however, that is nearest to being a living model is the delta-table with running water. Here is seen, first, river erosion with shifting channel, the formation of sand-bars, bank erosion, cutting down of the bed of the channel, delta-formation, flood-plain,

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meanders, and cut-offs, wearing of down-stream side of curves, together with the erosion of the outside and deposition on the inside of stream curves. Secondly, the destruction of lakes is shown by filling up from all inlets and draining off by cutting down of outlets. Thirdly, the recession up-stream of waterfalls and rapids can be watched from day to day. Fourthly, the shore lines of former lakes and old lake bottoms can be traced here on the delta-table, so that excursions to the old shore lines of Lake Chicago become intelligible even to fifth-grade children. Fifthly, we study the action of running water in sorting sand and gravel and the bedding of the resulting deposits. The whole subject of underground water, springs, and wells can be made clear by demonstrations on the delta-table. We made a working model of a canal-lock, and took toy boats through. We have used the table for miniature landscapes in staging battles and frontier scenes, the plantation life of the Colonial Period, as a model of Niagara Falls, to show tidal changes, etc. The delta-table is indispensable as a means of sense-impression for all of these various geographical images which otherwise could come to the pupils only by extensive travel, long continued adult observation, in widely separated parts of the country, and with enormously increased expenditure of time.

For the development of the imagery of a spherical earth, it is necessary that young pupils have daily familiarity through both sight and touch with as large a globe as practicable. We have a very serviceable home-made model (diameter, 52 inches) of the northern hemisphere. This is so suspended as to turn readily. It is large enough to make plausible to the senses the idea that a round earth can be so large that a limited area will look flat. We calculate the size of a manikin standing on this model and representing a man six feet tall as only seven-millionths of an inch in height. A railroad train half a mile long would scale down to three-thousandths of an inch on the model. The head of a common pin is larger than the ordinary horizon of our model manikin. This sort of building up of accurate scale imagery should accompany the use of all maps and models. It has a fascination, too, for the imagination of the child akin to that of the story of Gulliver among the Lilliputians.

Accurate relief models without exaggeration need to have as large a scale as practicable, and hence must represent but small areas. Such can be built up by cutting out folio maps of the geological sur-



vey on the contour lines and building up the elevations by layers. Some few relief models, those by Howell, for instance, are available that do not very grossly exaggerate height. The pictured relief-map, Nystrom's for example, has been greatly improved in recent years by Thorne Thomsen, and has some advantages over actual relief models.

After all, however, the greatest dependence in geographical teaching must be on large, accurate, detailed maps with everything drawn to scale, and with nothing, even to the lettering of names, out of proportion. For convenience in using such maps, they must be suspended vertically, as their nature makes it impracticable to walk over them. They are for reference, hence names in small capitals should be found on all details, as roads, towns, railroads, parks, factory plants, rivers, loeks, lakes, hills, mountains, bluffs, islands, bays, forests, mines, quarries, etc. These names should not be so large nor so conspicuous, however, as the representation of the objects themselves.

On the other hand, for the development of the mental imagery of a region, no maps with names are so well adapted as are blank maps, graphically showing the features of the country in great detail, but having no names on the larger features. The map names are undoubtedly a great distraction to the attention. Most people give their chief attention to the names on a map and fail to see many of the relations shown. More of us would know the states in the United States if maps more usually omitted their names. No one knows a region very well, if he cannot find his way on a good map without having the larger features named. There is no excuse for covering up the surface of a map with the state names, names of cities of over one hundred thousand inhabitants, names of the great lakes, the large rivers, the chief mountain ranges, etc. Anybody who does not know these should study a smaller key-map of reference. Any map should have only such names on it as the users are not expected to know without being told.

To sum up, I have pointed out the fact that the mental imagery of even the most fundamental geographical concepts originates in maps and models, not merely in observation of the actual world about us, and that it is maps and models that give accuracy to all our outdoor observations in traveling or on field-trips. I have, therefore, urged that we improve our material by providing larger maps, making true models free from exaggeration, giving far greater detail and ac-

curacy, and subordinating name to representation. I have used floor-maps and garden maps for their size and clearness in orientation. I have used the delta-table as the most valuable means of presenting the action of running water. I have urged the constant presence of the largest available spherical globe for the building up of a usable mental image of the round earth. Lastly, I have urged the importance of blank maps to show places and surface features in due proportion, free from the distraction of the large lettering in printed names.



A STUDY OF FOODS AND FOOD SUPPLY

This paper was written, not by the domestic science teacher, but other teachers who, in their classes in history, geography, and pure study, have found need to use material generally composing part of the domestic science course. An article must be so written only when cooking is not an isolated activity but an intrinsic part of school living, when the problems of the kitchen are solved in the classroom, and when the social demands of the class are ministered in the kitchen.

The school plans, for example, to give candy at Christmas to people who are in danger of having none. In consequence of that and in response to the motive impelling it, the cooking teacher has the children devise ways and means of making the candy. Perhaps the best time was when the second grade, having made fondant, invited the ninth to help them mold it. The little children and older ones paired off and gaily chatted together while they modeled bonbons and graced them with nuts or raisins, wrapped them in pretty ties, made Christmas cards to enclose with them, and neatly tied the parcels. Again, there is a yearly Saturday garden-party, here, instead of wandering in white flannels among blooming flowers, or instead of sipping chocolate under the pergola, as the name "garden-party" implies, the boys of the high school and the men of the faculty doff their coats and vigorously ply spades and rakes to prepare the garden for the spring planting. But hearty gardeners need hearty food, and the girls of the high school enter the kitchen to cook and serve a luncheon. During the spring quarter, too, there is a schoolwide honoring and fêting of the seniors. Usually two or three classes want to express their good fellowship by luncheons, and again the social demand molds the domestic-science course, and the kitchen is full of young cooks learning to make the dishes thought to be most pleasing to senior palates. Frequently, too, grades make sandwiches or little cakes for mothers' meetings held in the afternoon. In many such ways the utensils of the kitchen prove themselves the tools of a socialized group besides being the furnishings of a laboratory, and the cooking teacher becomes a servant of the community as well as a scientist.

Under such conditions what is the purpose of the teaching of domestic science? Not the mere acquiring of skill with egg-beater and mixing-bowl. That skill is needed and is gained, but gained as an incident, not as a prime object. Rather, the great purpose is to encourage social action. Secondary to that follow more academic aims, academic, yet tinged with social meaning and intent—to demonstrate by example and exposition the principle of social coöperation among men; to show the economic and historic significance of the world's food industries; to cultivate a habit of inquiring into physical causes and relations and a habit of making associations, of seeing farther than one's breakfast plate.

The outline of a course with these purposes differs from that of one with purely academic or purely utilitarian aims. It does not have for its main topics, mineral salts, proteins, fats, carbohydrates, and water. Perhaps the outline would read somewhat like this:

Sources of food:

Natural products.

Cultivated crops.

Geographical locations.

Conversion of raw foodstuffs:

Harvesting.

Milling.

Packing.

Preserving.

Transporting of foods.

Cooking of foods.

The best way to learn of the sources of food is to produce it. Children who have planted corn, harvested it, converted it into corn-meal, made it into johnny-cake, and eaten it, know what corn-meal is and where it came from. Experience with a school garden, while it may not be quite satisfactory, on account of the lost summers, yet makes very clear that the fruitful earth is indeed our nourishing mother. Every child in our elementary school gets this sort of experience with fructifying seed and productive soil. For there is the flower-garden, enclosed in a picket fence, which the whole school helped to make and paint. In the center of it, in a little plot of grass, stands a sun-dial, the gift of a graduating class. For this little area the seventh grade every year devise arrangements of beds, making their experiments on water-color charts. When they finally

settle on one plan, the high-school geometry class stakes out the intricate system of beds. In another corner of the school grounds is the less romantic vegetable garden, the scene of the boys' garden-party already mentioned. In these two places every grade below the eighth owns beds and plants crops, sometimes as individual preference dictates, sometimes according to concerted class plans—cotton and flax among the textile workers of the fifth, corn among the poultry-raisers of the second. Many children of the upper grades, too, apply for space and plant their heart's desire. Part of the garden work is done in class time, but much of it at odd moments and during play periods. There are lazy gardeners, to be sure, and uninterested ones, but there is also a goodly number of loving hands at work and eager eyes watching, enough to make the garden "a lovely spot." In addition to these two places, there is a border about the front lawn, filled with shrubs and bulbs and perennials. Here the sixth grade preside, introducing every spring new and attractive things. The kindergarteners seek out little neglected spots that need beautifying with crocuses and sunflowers. The first grade plant a forest of corn around their playhouse. The seventh care for hot-beds, where they start flowers and vegetables for the school garden or for gardens and window-boxes at home.

In the autumn we have our harvest-home festival on the lawn. Every grade garners its corn or cabbages or thyme or beets or Job's tears and piles them attractively on tables. Gradually this display of crops has attracted to itself other exhibits. Cooks from among faculty and children bring their jellies and canned fruits, needlewomen bring their laces and embroideries, collectors their stamps and post-cards and pressed flowers and specimens of minerals, animal-fanciers their cats and dogs and rabbits and birds and ponies, and young mothers their dolls. Children and teachers and parents spend a gay two hours at "The Francis W. Parker County Fair."

Every year when the children are themselves harvesting their crops, the seventh grade make a study of the world yield. Such an investigation gives significance to our little project of a school garden, puts it into its place as an unimportant exemplification of a universal industry. The children's personal garden experience makes a very real basis for the true imaging of the larger situation. A child who has himself put into the ground a dry, dead-seeming seed, all the time marveling at the mystery of its coming revivification,

who has himself cared for the tender sprout and created the right conditions of soil and water to bring about its growth, has some of the mental material for appreciating the astounding spectacle of a world at work in field and garden.



SPECIMENS FROM SCHOOL GARDEN USED AT "COUNTY FAIR" EXERCISE

On the day of the County Fair the seventh grade report to the school some of the results of their study. It has been the aim to present different phases in different years. At one time the subject was the world's wheat crop, with an account of the countries exporting and those importing; again it was the chief world products and the share of various countries in raising them. At another time the report dealt with the comparative value of the chief world products. A fourth topic was the significance of over-production and under-production. We here give a morning exercise, combining the seventh-grade presentation of the world situation and the report upon our own garden.

MORNING EXERCISE: THE COUNTY FAIR

Friday, October 4, 1912

SONG. "Now Sing We a Song of the Harvest."

Mr. Mortensen. After the reading the several grades will tell us what the yield has been from the garden this year, and the seventh grade will tell us of the world crops for 1912.

Starr (reading). "Autumn in a Garden."

Mary W. (first grade). Last spring we planted some popcorn, and this week we gathered it. We counted the ears, and there were 73 ears of corn. Here are two of the ears that we gathered (*holding up two goodly sized ears of corn.*)

James (second grade). Last fall we went to Mr. Hoy's farm, and he gave us two long ears of corn about this big, (*measuring off about ten inches between his forefingers*), and we saved them and planted them later on, and then yesterday we picked the corn and shelled it. These are the longest ears that we got (*showing two rather small samples*). We got a half gallon of corn, and we are going to feed it to our chickens.

Caroline (third grade). Last spring we planted our garden. We planted peppers and corn and cabbage, and this fall we gathered the corn, and here are the cabbages, and here are some beets, and here is the corn. The longest ear that we got measured eleven inches. Here it is, this long one.

Miss Musselman. I think the boy who raised the largest head of cabbage would tell us about it. I weighed it this morning, and it weighs nine and a quarter pounds. It is a very fine head of cabbage.

Henry (fourth grade). I think we have had a fine crop of potatoes this year. We sorted a lot of them when we dug them, and we have large ones and middle-sized ones and little ones. Here are some of the little ones. We are going to give them to the kindergarten, so they can feed them to their dolls. We are going to build a bonfire and roast the middle-sized ones, and the big ones we are going to sell, if we can get a price for them.

Mrs. Webster. The Lunch Room will be very glad to buy large potatoes.

Henry. Here is a lady that we made out of potatoes. Here is one of the middle-sized potatoes and here is one that looks like a pair of glasses (*fitting it to his eyes*).

Charlotte (fourth grade). Here are the beets that Caroline told about, and these two are curious shapes that we found. These on the stage are our whole crop. This is our very biggest one. And these are our prize carrots. These little ones we intend to give to the kindergarten. When we have our bonfire, we are going to cook potatoes and carrots. Each one is going to have one cooked in the fire, and then we are going to send the rest to Mary [the cook in the lunch room] to cook for dinner.

Mary P. (fourth grade). Our peanuts this year were a very disappointing crop. This is all we got (*holding a plant up with one nut on the root*). It was the only ripe one.

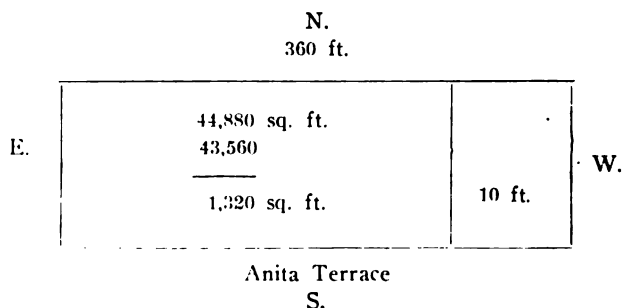
Christina (fifth grade). Last spring the fifth grade planted beans, peas, wax, and cotton. The beans came up very slowly, and the men [the gardeners who do the work during summer vacation] thought they were not going

to come up at all, so they planted tomatoes around them. The beans came up after a while, but although the plants were quite large, there were not many beans on them. The peas came up nicely, but there was no one here to eat them, and now the plants are all dried up. Only three of the cotton plants came up; and, probably on account of the cold weather, there is no cotton on them. We have taken them up and put them in pots and we are going to see what results we get.

Alfred (sixth grade). Last spring the sixth grade planted some herbs—twenty or twenty-five different kinds. Among them were thyme, rosemary, sweet marjoram, sage, dill, wormwood, and aniseed. This is dill for the dill pickles. This is aniseed. This is sweet marjoram. Most of the things came up very well and strong for the first year.

Polly (seventh grade). Here are some of the flowers that the seventh grade planted last year. We planted six hotbeds full of seeds. We tried to plant them so that we would have a yellow and blue garden, and one of mixed colors, and we tried to plant gardenflowers that would bloom in the fall.

Helen (seventh grade.) This diagram shows the girls' baseball field north of Anita Terrace:



We measured it the other day, and found that it contained 44,880 sq. ft. An acre contains 43,560 sq. ft., so if a strip 10 feet long is cut off one end, the remainder will about equal an acre. The third grade told about the corn they planted. They planted it on 56 sq. ft. of ground and got one-seventh of a bushel. If they had planted the same seed on one acre of ground, that is, this much of the north field, they would have got 111 bushels.

Mary (seventh grade). There are three main classifications of farm crops—grain, truck (vegetables) and fruit. The seventh grade made charts of the different grain crops in the different continents. There are so many kinds of vegetables that we did not have time to make a comparison of vegetables. This chart shows the number of bushels of wheat produced by the different countries in 1911:

WHEAT CROP OF 1911

	Bushels.
Europe	1,805,603,000
North America	864,262,000
South America	170,174,000
Asia	516,521,000
Australia	106,644,000
Africa	88,589,000

EUROPEAN WHEAT CROP OF 1911

	Bushels.
Belgium	15,745,000
Bulgaria	48,295,000
Denmark	4,466,000
Finland	125,000
France	315,126,000
Germany	149,411,000
Greece	8,000,000
Italy	192,395,000
Montenegro	200,000
Netherlands	5,511,000
Norway	271,000
Portugal	11,850,000
Roumania	93,724,000
Russia	447,038,000
Servia	15,312,000
Spain	148,495,000
Sweden	7,945,000
Switzerland	3,524,000
Turkey	20,000,000
United Kingdom	66,289,000

Europe, as you see, has a little more than twice as much as North America; North America, a little less than twice as much as Asia; Asia, more than twice as much as South America. The two heaviest wheat-producing countries in Europe are Russia and France.

Erna. This is a chart showing the value of products in the United States. The value of the corn crop is \$1,565,258,000; wheat, \$543,063,000; cotton, \$859,840,000; coal, \$716,286,000; gold, \$96,890,000. Some people believe that gold is of the most value of all the products of the United States, but corn is far ahead of it. The value of iron is \$327,334,000. It is about the smallest of those of great importance to our country.

Harnden. This is a chart showing the world's corn crop for 1911, 3,481,700,000 bushels. North America had 2,740,673,000; Europe, 585,732,000; South America, 32,539,000; Australia, 13,933,000. You see the difference between Europe and North America. The corn crop of North America is

the largest, and you will see that corn is the principal crop of North America.

Helen. Another important crop is rye. Europe raises the most, because they use principally rye bread. We raise so little because we use principally wheat bread.

One way to become conscious of the source of food, as we have said, is to produce it; another is to see it growing, as this report by the first-grade children and their teacher shows them doing.

THE FARM EXCURSION

Each autumn, after the children of the first grade have gathered and husked the popcorn which they planted in the spring, they make a trip to a farm. Many of the children have already visited a farm and have experienced the joys of riding on a hay-rack, sliding down a straw-stack and picking clover blossoms. They have undoubtedly observed the various kinds of work which are needed in caring for animals, and which the farmer finds necessary in the cultivation of his grain or vegetables, but the school excursion does more than repeat former experiences. It is not only one of sensuous pleasure, but it is related to essentials closely connected with the child's own life. This visit affords an opportunity for a variety of experiences, and through their interpretation is found an answer to many questions which have arisen from the work in domestic science, the study of primitive man, and the work in the school garden; and the visit aids the child more clearly to understand his work in literature. For instance, when the class was learning the rhyme,

"Little Boy Blue, come blow your horn,

The sheep's in the meadow, the cow's in the corn,"

this question was asked: "Why should Little Boy Blue drive the sheep out of the meadow?" The children answered: "Because the sheep would trample down the grass, and the farmer wants it for the horses and cows to eat in the winter." Then they were asked, "Why do they want the cows driven out of the corn?" And Jean replied: "Because they need the corn for the pigs, or to put in the silo for the cows in cold weather." The trip solves such problems as this: Where do cream of wheat, rolled oats, corn-flakes, and flour come from, as well as cream, butter, eggs and the various meats and fruits that appear upon the table? It raises, too, new matters for solution relating to other social activities.

As the children step out of the car, they see the sun shining through the clouds perhaps, but not through smoke; they feel the cool, clean air, and smell the dry leaves and grass; they jog along the road in a hay-rack, wondering how long it will be before they slip off; and upon arriving at the farm they jump, run and shout. Here there is plenty of room, something to do, and many things to see and think about. The children visit the apple orchard, and, with the help of the farmer, climb an apple-tree and experience first hand the fun of shaking down the fruit. After doing this they more fully appreciate where their apples come from, and how they grow and are gathered. They see the great flocks of geese, turkeys, ducks, and hens and realize that the home of their Thanksgiving turkey was on a farm and that the eggs that they have for breakfast have taken a journey before reaching their plates. They now understand that the feathers or down in their pillows come from fowls, and the great number of feathers lying on the ground makes them realize the real meaning of moulting and why the fowls get their thick, warm winter covering.

The children now hasten to the pasture, near the barn, to look at the fine herd of cattle. The farmer has given them permission to go into the long, low, dimly-lighted stable; and with great delight they walk very quietly and with subdued voices so as not to frighten the little calves and the great bull fastened in one of the stalls. They enter the pens where the calves are walking about and gently stroke their soft backs and pretty faces. They look into their large round eyes and smell their fragrant breath. Then with something of awe and trepidation they slowly walk down to where the bull is bellowing because of the unaccustomed sight of so many visitors. They watch the farmer as he gently strokes the animal's broad back and with an assuring tone speaks to the great creature, which ceases to bellow when he knows his friend is near. The children see that this warm stable is where the cattle are kept during the long, cold nights and days of winter. The farmer has consented to milk a cow, and the process is watched with great interest, because some of the children have never seen a cow milked and only know of milk as it appears upon their tables or as it is seen in bottles brought by the milk man.

The machinery that is standing about is a source of curiosity. They examine the plow, harrow, hayrake and all other machinery

that the farmer may have. Touching the various implements, looking them over, and climbing upon them tends to fix in the child's mind not only the machine itself, but its uses as well. Later this knowledge helps to form a basis of comparison, for when the child begins to use a spade and a hoe to loosen the soil in his garden, if he knows that the farmer is using a plow in his great field for the same purpose, and if he learns that the Indian simply scratched



FIRST-GRADE DRAWING OF FARM

the ground with a stick, he begins to look for a reason for the great difference between the white man's implements and those used by the Indian. He appreciates, too, that the primitive man with his crude tool must live almost entirely upon animal food, while he himself has the benefit of all that the soil produces. He can see that this difference is due to the men who thought out ways of making better tools and to the hard work of the farmer, who he feels is his very good friend.

In the schoolroom the different experiences gained on the excursion are organized and related to bits of knowledge similar to the examples already given. The children give the names of the various meats they eat—pork, veal, mutton and beef. This list is accompanied by the names of the animals to which each kind of flesh belongs. The food and shelter of animals are topics which are separately discussed, and the following points are also considered:

Why do fowls moult in the fall?

Why do animals shed their hair or fur in the fall or spring?

Why does the pig have such a long nose?

Why is the food in the silo good for cattle?

How do we prepare food for our own winter use?

The experiences and facts gained are written upon the board and used as reading lessons. The children draw pictures of animals upon the board, writing the name of the animal and its food. Other pictures of the farm are drawn and painted, showing the corn-field and apple-orchard, and as another form of expression a farm is made in the sand-table, the animals being modeled in plasticene. All this helps to make a beginning for the work in domestic science, nature-study, and industrial history.

This year we summed up the experiences gained in visiting a farm in a morning exercise given to the entire school. The verbatim report of it follows. To the reader this may seem very choppy and disconnected, lacking in rhythm and beauty, but if he had seen the faces of the children, heard their piping voices, and felt how intense was their desire to make everyone understand what they saw and did at the farm, he might think differently.

MORNING EXERCISE—FARM EXPERIENCES

Tuesday, January 19, 1915

Bobby. We took the Northwestern train and got off at Lombard. Mr. Hoy met us with a hay-rack, and we rode to a corn field, and then we came back and got off.

Joan (showing stereopticon picture). Here is the hay-rack with the mothers and children on it, and Mr. Hoy driving.

Fred W. Then we went and saw the horses. Horses are used to draw the hay and the corn and everything needed around the farm. In the summer the horses eat grass, but in the winter they eat corn and hay.

John. A long time ago they had a big thing like this (*showing a picture*), called the scythe, and used it to cut the grass. But the man got so tired, and he said, "Oh, my, I wish I had a long scythe out here to cut the grass, and some horses," and a man made something like that (*showing*). A long time ago there was a rake like this used on big farms and little farms. And the man got so tired, and he said, "Oh, my, I wish I had a big machine just like this, with two wheels and horses," and soon a man made something like that. And they had a rake like that at Mr. Hoy's.



ARRIVING AT THE FARM

Billy. This is the way they stacked the hay up. They stack it up with pitchforks, and this is the way they load the hay on the hay-racks. They load it up with pitchforks. And sometimes they stack the hay up with the hay-loader on the hay-racks. And they load the hay in stacks with pitchforks like this. We saw the hay at Mr. Hoy's and slid down in it. And we told stories.

Fred R. This picture shows a mowing-machine used to cut wheat. This big wheel goes around and drops down under the knives. This is the way they stack the wheat, so the rain won't get in. They put a stick in the top and tie some of the wheat to it, and that makes a little roof, for if the rain got on the wheat it would make bad flour, and if it got in the oats it would spoil the oats so the cows and horses would not like it.

When we were at Mr. Hoy's we were on a straw-stack. When it rains out in the pasture, the cows and horses go up beside it so they won't get wet.

Norman. This is a picture of the straw-stack. We climbed up on the straw-stack and slid down.

These are the cows in the field (*showing picture*). Those are the children with the cows.

Elizabeth. When we were at Mr. Hoy's we saw a cow milked, and the boys are going to show you how to milk it. (*Boys give pantomime.*)

Betty. When we were at Mr. Hoy's we saw the calves, and when we saw them they were afraid. We saw them wash the bottles and strain the milk in the bottles.



ON THE STRAW STACK



INTERESTED OBSERVERS

John L. They put the milk in the can, then take it to the train and put it on the train, and then the train takes it to the city, and they take it off and take it out of the cans in some bottles and go around and sell it.

Billy. First they take it off the train in cans and shoot it down a little chute like this, and shoot it right into the milk-wagon and put it in the bottles and go around and sell it.

Fred W. This is a separator (*showing picture*). We saw a separator out in the barn, and they put the milk in there and turn a crank, and cream comes out one side and milk out the other.

Joan. This is where we told stories in the barn (*showing picture*), and this is the big silo to put the winter food in.

Joan. When we were at Mr. Hoy's, we saw the corn put in stacks like this (*showing picture*), and here is a corn-cutter. And we saw a silo. They put corn in it, cut in fine pieces, to feed the cattle in winter.

Billy. At Mr. Hoy's we saw cattle, cows, horses, and pigs. The pigs give pig's feet, sausage and bacon, and when they eat out in the pasture, they eat roots and dig with their noses, and their noses are long. And they drink milk and eat corn.

Charles. This is a plow. They use these plows for little farms, for plowing up the earth. Another kind digs up potatoes. When we were at Mr. Hoy's we saw a plow, but it was not working. Way out west they use this kind of plow for big farms. (*Picture of steam plow.*)

Aris. When we were out at Mr. Hoy's we saw turkeys, chickens, and ducks and geese. And the feathers fall off in winter, and they get warmer feathers.

Fred. My mother got some feathers to trim the baby's bonnet.

Wharton. Mr. Hoy put us up on the limb of an apple tree. Some of the children shook the limb, and some of the apples fell down, and some of us gathered osage oranges. There were osage oranges from the hedge. Sometimes they get ripe, but osage oranges are not good to eat. They are green.

This is a picture of the apple orchard (*showing picture*). The children are out there gathering apples at Mr. Hoy's.

Miss Cooke. You must have had a very nice time. How many have been at that same farm? (*Many hands.*) Then you know just how nice it is. Is there anything else to add about a farm?

Child. When I was out at a farm—I think it was 8,000 acres, I went to a dairy and saw the man milk the cows, and there was a white cat there. We saw some horses, and I think there were some chickens.



THE CHILDREN GATHERING APPLES

Miss Cooke. That makes me think of a farm I visited last year, where the oldest little girl had learned to milk the cow. She had two kittens. Every morning when she went out to milk the cow, she would have the kittens sit up on her back, and they would open their mouths, and she would milk into them.

Child. When I was out at the farm, we husked corn. When you husk corn you have to use gloves, or else you will get your hands cut.

Mary. When I was out at a farm, I saw them husk corn. They had a great big husking-machine, and the corn that was not husked I helped to husk.

Elizabeth. One summer I was on a farm where they had three cows. There was a little nest of birds up in the eaves at the top of the barn, and one day when the farmer was milking the cows, the birds got out on the edge of the pail and drank the milk out of the pail. I thought it was very queer that birds would drink milk.

In the fifth grade, beside the garden experience and the excursions, goes a more careful study of one of the most important sources of our food, which adds breadth and completeness to the memories carried from the first grade.

CORN AS A TYPE OF THE GRAINS

Corn is chosen for the study as a type of the grasses, not only because it is historically and economically our greatest American cereal, but also because it exhibits in greatly enlarged form and variation the characteristics of the other grains. Its size aids greatly in gaining attention and giving clearness to the characteristics of grasses, while the comparison with other grains secures accuracy and breadth to the study.

"We compared the corn with grass and trees," says one pupil. "The roots of the corn are called fibrous roots, and are very long, slender, and numerous. The roots of the pine-tree have one main tap-root and many other branch-roots growing out from it. The corn cannot live all winter as the pine tree can. The latter stores up food in the roots and trunk for winter."

"Corn really is a grass," says another pupil. "The fibrous roots, nodes in the stem, and long slender leaves are like those of the grasses. The corn-blade has no stem, as most leaves have, but has what is called a sheath. This, instead of fastening to the stalk as a stem does, encases the stalk. Dirt frequently collects between the sheath and the stalk. Rain wets it, and smut develops in the corn. The long leaf has a much stronger attachment to the stalk, however, and helps to strengthen it. The corn leaf is a great deal longer than ordinary leaves, so it must have something else to help hold it up besides the sheath. It has what is called the midrib. That is a stiff kind of rib, which runs through the middle of the leaf. This helps hold the leaf up to the sunlight a great deal better. The veins in the corn-leaf run lengthwise. There are very minute veins, also, that run crosswise that are so small they cannot be seen by the naked eye. We looked at them through the microscope."

"The veining of the leaves and the construction of the stalks," writes Henry, "are as interesting to me as the construction of a locomotive is to an engineer. When you get to know the plants, you feel as though you ought to have a garden where you can take care of real plants and study them."

"Plants move," writes Ruth, "though many people do not know it. It is true that they do not move with a jerk, but they move very slowly. When the corn gets beaten down by a heavy rain or hail storm, it gradually works itself up again, although it never gets perfectly straight as before. When we move, we bend our joints. That is the way also with the corn. It bends at the nodes."

"Plants absorb water from the ground through their roots. If we sprinkled water only on the leaves of a plant it could not live. A plant also must not have too much water. A tree would not grow in a lake. Sand or gravel never gets so wet and soggy as clay does. That is the reason we find trees growing on the sand-ridges of the Chicago plain."

"When we eat apples," writes Ruth, after the class had made a com-



CORN WHEN BEATEN DOWN BY A STORM



CORN WHEN IT HAS RAISED ITSELF UP

AFTER A STORM

ILLUSTRATION FROM RUTH'S PAPER

Narrative study of various seed-forms, "we are really eating the pistil of the plant. The bananas, peaches, and plums we eat are also just the flower pistils. The pistil is the part of the plant in which the seed is developed. In the case of the wheat, the chaff is the corolla and calyx, surrounding the kernel, and the stamens which hold the pollen."

In the fifth grade the children get a more comprehensive view of the subject of food converting than they did in the second. There they add to their own crude hand-milling visits to grain elevators and flour mills, and the use of printed information.

FLOUR MILLING

For the type in flour milling, we turn to wheat. Barbara says:

"The first thing I did was to mash the wheat with a potato masher as fine as possible, and then to sift it through a wire sieve. Then I ground some more wheat as fine as possible and then sifted it through a piece of cheese-cloth. Then I put the material in four bottles: in the first, unground wheat; in the second, what was left after the first sifting; in the third, what went through the first sieve; in the fourth, what went through the cheese-cloth."



DIAGRAM OF THE EXTERIOR OF THE OLD DUTCH GRIST MILL

Another pupil, writing about an excursion to a grist mill, says=

"We went to visit an old wind mill near the Des Plaines river. When we got close to it, we saw that one of the driving-wings was broken off. The mill is about forty years old. There are five floors, counting the top, which will turn around. The inside of the mill looks much better than the outside. In a great many places the shingles have come off, and the balcony, which may be entered from the second floor, is tumbled down on one side.

"A wagon drives up to a little platform about three or four feet broad. Then the wheat, which is in bags, is carried in and dumped into a hopper through an opening in the floor.



DIAGRAM OF THE INTERIOR OF THE OLD DUTCH GRIST MILL

"The grain elevator passes through the first floor, and consists of a number of tin cups fastened to an endless belt and the whole boxed in. When the wheat reaches the top floor of the grist-mill, it is dumped down a chute to the receiving-separator. This separator is made of two sieves, cylindrical in shape. One of them is within the other. The inner one extends a little

"The first thing I did was to mash the wheat with a potato masher as fine as possible, and then to sift it through a wire sieve. Then I ground some more wheat as fine as possible and then sifted it through a piece of cheese-cloth. Then I put the material in four bottles: in the first, unground wheat; in the second, what was left after the first sifting; in the third, what went through the first sieve; in the fourth, what went through the cheese-cloth."



DIAGRAM OF THE EXTERIOR OF THE OLD DUTCH GRIST MILL

Another pupil, writing about an excursion to a grist mill, says

"We went to visit an old wind mill near the Des Plaines river. When we got close to it, we saw that one of the driving-wings was broken off. The mill is about forty years old. There are five floors, counting the top, which will turn around. The inside of the mill looks much better than the outside. In a great many places the shingles have come off, and the balcony, which may be entered from the second floor, is tumbled down on one side.

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further out at the end than the outer sieve and empties into a chute. The mesh of the inner sieve is large enough to let the wheat through, while the outer sieve is too fine, but will let mustard seeds or cockle go through. The wheat, chaff, and screenings then fall each into a different chute.

"On the second floor the wheat is ground and sifted. It is ground by millstones, as was all wheat forty years ago. There are only ladders from one floor to another, and they get steeper from story to story. A door at one side leads to the balcony, from which the miller can reach the rope to operate the brake on the top floor.

"The grinding-stones were imported from France, and are incased to keep the wheat in and the dust and dirt out. The upper stone, or runner, turns, while the nether millstone is stationary. There is a bell in the bottom of the feeding-hopper that will ring as soon as it is no longer covered with wheat. It thus gives the miller warning when the wheat has run out. There are two sets of millstones in this mill. They are turned by an iron axle running vertically through the mill and geared to the power-windwheel on top. After the wheat is ground, it is taken up in an elevator to a chute which puts it into the middlings grader. The wooden frame of this reel is covered with silk bolting cloth of two grades,—the first three-fourths is real fine and the last quarter is coarse cloth. Through the first goes the flour, through the second the middlings, while the bran is dumped into a separate chute. There is a screw conveyor under the reel to shove the flour and middlings along to one end and down the chutes to the first floor, where the bags are filled."

"On the third floor there is one great big wheel, thirteen feet in diameter, which has cogs on the rim of it, and which is geared to the power-wheel. On each side of the big wheel are two small pinion-wheels which turn the axles of the grindstones on the floor below."

"There is nothing on the fourth floor. On the top floor there is machinery to make the axle of the big wheel turn, changing from the horizontal to the vertical shaft. Here, too, is the brake to stop the mill, and the smaller windwheel to furnish power to operate the wheels on which the cap turns. There is very little iron in the whole mill. The wheels and many of the shafts are of oak.

"Leaving the mill, when we got on the main road again, we had a very picturesque view, and felt as if we were in Holland."

After this we made an excursion to a modern roller-process mill. Here the operation is more complicated, but by the aid of our earlier experience at the grist-mill, and by the study of working models on the walls of the classroom, the children gained a very clear conception of the process. One of them thus writes of the differences between the two mills:

"In some ways the patent roller-mill and the old grist-mill are very different. In the grist-mill the wheat is ground only once, while in the patent mill it is ground from four to eight or nine times. The advantage of having



THE OLD DUTCH GRIST MILL.

the wheat ground more than once is that the more grindings the wheat goes through, the freer the bran gets from the starch and gluten. In the grist-mill, the middlings are used for feed, but in the patent-process mill the middlings are ground again and made into flour. In the old grist-mill the millstones are, of course, made of stone, but in the roller-mill the grinders are made of steel. The steel rollers have corrugations on them, though some of the rollers are perfectly smooth. The old grist-mill had no middlings purifier. This is because they have no use for the middlings. But the patent mill has a middlings-purifier."

Thus is the subject of the source of our food-supply opened up, to be continued in the commercial geography of the high school.

The earth produces vegetables and grain, and our children have seen the miracle happen. But they need to know how great a task



DIAGRAM OF THE EXTERIOR OF A PATENT PROCESS ROLLER MILL



DIAGRAM OF THE INTERIOR OF A PATENT PROCESS ROLLER MILL

it is to prepare the natural product for man's consumption. He shall they be shown? A morning exercise given by a second grade after three or four months' work with foods, illustrates how the children learned by actual experience about food conversion.

MORNING EXERCISE—FOOD

April 3, 1913

Judy. The second grade has been talking of the many kinds of food that people eat. Last fall we gathered the corn that we planted in the first grade, and we husked it and fed it to the chickens. And we have been to the grocery to see what kinds of food people get there. And then we went to the truck-gardens, and we saw radishes and lettuce and different kinds of things, and we wondered how these things got to the groceries in different parts of the city. Then we went down to South Water Street and saw the railroad tracks and the trains going back and forth to Chicago. And there were different kinds of fruit there, and all sorts of vegetables. Our mothers had been canning fruit and putting it in the cellar, and in the kitchen she has a bin for flour and meal, where she mixes bread every day, and we wanted a chest for our own, and we made one.

James. My chest is all filled, and in each little place there is one bag of flour—wheat flour, rye flour, corn-meal, oatmeal, buckwheat, and barley flour. Before we made our flour, we brought different kinds of breakfast food from home—oatmeal, Quaker oats, and lots of other kinds. We knew our fathers and mothers would not give them to us to eat unless they were good for us, and we wondered what was in them. We tested them, and poured a little iodine on them, and if it turned blue, that showed there is starch. This is Quaker oats (*holding up a glass tube and performing a test*). This is corn flakes (*again making test*). That turns the same way, and that happens to all the others.

Dickey. Mrs. Webster told us that starch helped to make us fat, and we thought it ought not to make us fat only, but strong and grow and have muscle, and that it ought to have something in it besides starch, and so we got some bags and string, and we took the flour that we had in the chest, and we put one kind in each bag, and we tied it up and got a cup of water and set it on our desks. And we put the bag into the cup. Only once in a while we would shake it up and down, and the water would turn white, and that was the starch in it. We left it there all night, and the next morning we opened our bags, and every one looked sticky, except the cornmeal, and the cornmeal would just crumble, and I wonder if you can guess which was the stickiest—buckwheat or wheat flour or rye or cornmeal or barley? Can you guess which was the stickiest? Yes, the wheat flour was the stickiest. It was so sticky you could just pull it like gum. That showed that it had gluten in it, and gluten makes you grow and have muscle and be strong.

Robert. I'm going to tell you how we made flour. We took some of this wheat, and we threshed it with our hands, and then we blew the chaff away like this. Then we took some oats and threshed it like this (*rubbing it between his palms*). But the oats are much harder to thresh. And this is much easier. The husks stuck to the kernel much more than the wheat did. We decided that we would not thresh it all with our hands; it was too hard,

so we went over to Mrs. Webster's. She had some that was threshed with a great big threshing-machine. So we ground the wheat with a mortar, but it was not fine—we could not make it very fine. And then we sifted it through cheese-cloth, and then we sifted it through silk—like the great big mills use. And we could not sift it all, because it would be too hard, so not all of our boxes of flour are pure.

Olga. When the second grade made their corn-meal, they tried to make it like the Indians made it. The Indians had big stones, with rough ridges across the stone. But we did not have a stone with rough ridges, so we used a grater. We rubbed the corn on the grater, but the grains of corn were too dry and rolled off. Then we tried a coffee-mill, which was better and easier than a mortar and pestle or a grater.

Robert. There is something nice and useful that is written down on a piece of paper and folded up under each little bag of flour. It is for our mothers, and not only for our mothers, but for other people who want to cook. Can anybody guess what it is!

A Child. A recipe.

Robert. The first time we went over to Mrs. Webster's, we had the recipe written on the board, so we studied it carefully, and then we did our cooking. Then when we came back to our room, Miss Enoch did not know what the recipe was, so one child would tell it, and if he made a mistake, the other children would correct him, and in that way we got it right. And the first one we wrote wasn't good. It had too many "I's" and the people's names in it, so we took a pencil and put a circle around each word we did not need, and then we took the recipes over to Mrs. Webster and showed them to her. She said they were only big enough for one person, and we wanted them big enough for a whole family. And so we made them four times bigger. I will read you one. This is chocolate caramels:

2 cups of brown sugar.

1 cup of butter.

$\frac{1}{4}$ pound of Baker's chocolate.

$\frac{1}{2}$ cup of Karo corn-syrup.

$\frac{1}{2}$ cup of milk.

1 teaspoon of vanilla.

Put all together except the vanilla, and when the candy is done, you can put the vanilla in. Try it in some water, and if it is hard, it is done. If it is not hard, it is not done.

William. After we had done a lot of baking with Mrs. Webster, we visited a big bakery. We visited Mr. Bartel's bakery and saw Mr. Bartel make a cake. He put it in a mixing bowl this big (*measuring it off with his arms*), and then he put it in a barrel. He put lots of things in, and each time he put something in, he stirred it up with his hands. After he had put all the things in, he made different little cakes, and there were twenty-nine altogether. Two of them were birthday cakes. He threw the dough over

into the pan, and I thought it would go all over the floor, but he didn't make a muss, and after he had put the cakes on, he put the shovel into the oven and shoved them far in. While the cakes were baking, he thought he would make chocolate frosting, and when the cake was done, he put English walnuts on it, and then we took it home and had it for lunch.

Elizabeth. He bakes a hundred and fifty loaves at a time, and three hundred rolls. He bakes his cake in the daytime. He sends over thirty loaves of bread to Mrs. Webster every day.

We took all our recipes that we had used this year, and we thought it would be nice to make a cook-book of them, and we thought what kind of a cover we would like to make. We wanted something that would be pretty and something that would make you think of what was inside. Here is one of the books (*showing various books*). On this cover there are some loaves of bread, and there is a big mixing-bowl, and a barrel, with a baker. And there is another with the long shovels, and this is a birthday-cake, and this is a man cooking. There are ten little recipes in here—grape jelly, grape juice, Quaker oats, rye muffins, corn-starch pudding, johnny-cake, bread-making, chocolate caramels, barley muffins, and cup-cake.

D'Orsay. This is the white corn that we used to make hominy. And this is the hopper that we made the lye in. The hopper has a hole in the bottom, and on it we put straw to keep the ashes from spilling out, and then Mr. Hendry saved some wood ashes for us, and we filled the hopper and then poured water on the ashes. And we measured the water, and we found that we had thirty-six cups of water and three cups of lye. It took four days to make the lye.

Benjamin. This is the way we made the hominy. We had one and one-half cups of white corn, and it weighed nine ounces. We soaked it in three cups of lye for three days. And then we took it out and washed it thoroughly so it would not make our hands hurt when we touched it. It looked yellow inside. But that was just the skin. Then we rubbed it to take the skin off, and then we sent it over to Mrs. Webster, and she cooked it for six hours. When we brought it back again, we weighed it, and it weighed twenty-one ounces. We measured it again, and there were almost four cups. We had it for lunch.

Miss Cooke. That was very good hominy, too.

Stephen. There is something good and dry and sweet, under the tray in my chest. Can anybody guess what it is? It is made out of grapes.

Child. Raisins.

Stephen. We put our grapes on the radiator to dry, and it took fourteen days to do this. The first day we had five pounds. The first time we weighed them, they had lost three ounces (*showing the weights*). Then we put them back and changed them around, and the next time we weighed them, they had lost two pounds and four ounces (*again holding up the*

weights). And the last time we weighed them, they had lost six ounces. Altogether, they lost two pounds and thirteen ounces, and we had left only two pounds and three ounces.

Alexis. There are dried apples in the bottom of my food-chest. When we weighed the apples, before we dried them, they weighed two pounds and seventeen ounces. After they were dried, we weighed them, and they weighed one pound and seven ounces. They had lost altogether one pound and ten ounces, and when we had dried the grapes and apples, we wanted to taste them and see how they were. We tasted the grapes and they all said they were sweet, and when we tasted the apples, some said they were sweet and some said they were sour, and some didn't like them and some did like them. And we wanted to make a test, to see if the sweet had gone out or not. We had two pans, one a wide, shallow pan, one a deep pan. We took a half cup of sugar, half a cup of water, and we stirred them up, and put one-half in each pan, and set them on the radiator. And then, in three days, the water was all gone, and we measured the sugar, and it measured a half a cup, and that showed that the sweet didn't go out of them, but that it stayed in.

There remains, of course, the large subject of the actual cooking of foods. This is a cumulative experience in our school, beginning with the popping of corn in the kindergarten and ending with the preparing of a three-course luncheon in the high school, continuing from the making of butter and cottage cheese in the first grade to a careful study of milk and milk-handling in the tenth, and from the baking of tiny bread loaves in the second to a study of yeast and doughs and batters in the sixth. But we have nothing new to tell on a matter so well worked out in schools all over the country. The purpose of this paper has been, rather, to point out the larger activity of which cooking is but one phase, to suggest that we put emphasis upon the ideas associated with cooking, that we give it an intellectual and social background.



EXCURSIONS

"Human knowledge has two forms: it is either intuitive knowledge or logical knowledge; knowledge obtained through the imagination or knowledge obtained through the intellect; knowledge of the individual or knowledge of the universal; of individual things, or of the relations between them: it is, in fact, productive either of images or of concepts."* To produce both images and concepts is the object of the excursions which are so prominent a part of the work of the school, and which form a continuous experience in the life of the pupil. From the kindergarten through the high school he goes out on excursions to gather material for study or to make more concrete to him the knowledge he gains from the printed page or from other secondary source. Sometimes, as in the high-school excursion of the Art Department to see an exhibit of Japanese prints, exquisite in line and color, the purpose is to heighten consciousness through contact with esthetic values. The result of such an excursion for the pupil must be an increased sense of beauty and form whether or not he bring back an incidental knowledge of the difference between a Hiroshige and Hokusai. This "heightening of consciousness" is the object, I think, in that school activity which is closely connected in theory with the excursions, the artist recitals; although in the exact sense of terms these recitals are "incursions" rather than excursions, their purpose seems to be the direct bringing of primary experience to the life of the pupil—the making of a contact, as physicists say, between the pupils and fact, which is in this case strong, beautiful composition and fine artistry. For this reason I have included the artist recitals in the list of this year's excursions, because their contribution to the pupils seems to be identical in quality with a certain type of excursion.

In excursions where knowledge gained by the intellect is the thing sought after, heightening of consciousness is incidentally included. (See Miss Cleaves' article on *Eighth-Grade Field Trips in Physiography*, in this volume.) On an industrial excursion to South Water Street the second grade brought back for classroom work material much more real to them, probably, than that same material

*Benedetto Croce, *Theory of Æsthetic*, tr. by Douglas Ainslie, Macmillan & Co., London, 1909.

would have been, presented through leaflets or other indirect means. (See quotation from morning exercise by second grade in article of this volume on *A Study of Foods and Food Supply*.) The second-grade children may have brought back a sense of the vastness of the city's industry. But the things they saw, the freight-sheds and the refrigerator-cars, the banana storage-rooms at Garibaldi's and the fruit-stores along South Water Street, gave them directly through their senses the stuff to which they applied their minds in the classroom. To a twelfth-grade chemistry class, the excursion to the Cement Mills may serve two purposes: their fund of chemical knowledge may be increased, and they may see proven practically the things they have learned from a textbook and tried, in less practical fashion, in the laboratory. The usefulness of the laboratory is extended: in the commercial plant there is suggestion of great possibility. New activities are glimpsed which cannot be sensed in the laboratory, which is in itself a more direct way of gaining information than the textbook. The pupil comes back to the laboratory with an increased sense of its purpose.

The value of both types of excursion lies, of course, in the directness of the experience. For either sort there must be definite, careful preparation. The industrial excursion, which is a type of the intellectual excursion, brings an increased knowledge of the particular industry studied; the thing gained is actual quantitative increase of knowledge, whether the excursion be of the third grade to a cold-storage plant or of a high-school class in commercial geography to the Stock Yards. Also, there is usually an increased sense of lack of knowledge: a pupil comes back from an excursion asking questions; new fields are open to him; he sees new possibilities in the subjects he has been studying. He may acquire intellectual curiosity. The successful excursion brings out a sense of initiative in children. They learn that there are new things to know, and from this they are moved to try to see and feel and correlate with their already acquired knowledge the new sensations and experiences they meet.

There is no modifying medium; the material itself is the thing that the child touches, sees, and learns to know. He gains his knowledge through his senses and it becomes vivifying fact to him, not dull abstraction. The first-grade child who has built a brush house in Budlong's Woods has a factual knowledge of the difficulties of primitive peoples who built without tools. From an Eskimo hut in

the Field Museum he gets sure knowledge of the structure and look of this sort of domicile that gives him a standard of criticism for the model he makes in clay. He knows what an Eskimo house should be, not merely from a flat picture or an attenuated model, but from the thing in its setting; though it might be better if he could go to Alaska to see it in reality. Very often, however, the pupils bring more tangible things from the excursions than knowledge or criteria. The fourth grade go to the sand-dunes and to Ravinia. Back to school they come, laden with flowers and fruits. They learn to know the spring flowers, and press them to keep in herbariums, and from the fruits they make jelly and preserves. The making of thorn-apple jelly out of thorn-apples one has collected has something of the flavor of a great adventure and the savor of the dignity of toil. Fred's paper *About Jelly* shows a spirit of high seriousness in matters culinary.

I am going to tell you how to make thorn-apple jelly. Cut out the worms and bad places, because they are bad to eat. Wash them because they are dirty. Boil them to make the juice come out. Put a cup and a quarter of sugar into 1 cup of thorn-apples, to make them good. Boil them again, to make them be jelly. Let them jell one day and one night. Then it will be jelly. Pour some parafine on them. Then it will be done.

The use of first-hand observation in science teaching in the fourth grade is brought out in an article in Vol. II of the Year Book. (See Miss Hall's article on *A Nature Excursion*, p. 75.) This and another morning exercise of this grade showed how diversely the experience of the sand-dunes may be used.

MORNING EXERCISE: SAND DUNES

Hermon. We haven't much to tell this morning, but we have lots to show. (*Miss Hall holds up a glass jar with a large frog in it.*) We are going to keep him in the third-grade aquarium.

Elizabeth. We went to the sand-dunes yesterday and found quite a great many grapes. We got three pans full. These are the sorts of grapes. I am going to tell you how we found them growing. There was a big vine growing on the sand. We are making grape juice out of the grapes this morning (*holding up a quart jar about half full of grape juice*). This is what I have, and all the children will have about that much.

Clara. We found some cactus growing. They grow right in the woods in the sand. This is the plant and fruit. We are going to make jelly out of the fruit.

Theodore. We got some rose-hips that we are going to preserve. Miss

FIRST GRADE

Budlong's Woods	Nature Study
Farm	Nature Study
Lincoln Park (many trips to the "Zoo" and other special features)....	
.....	Nature Study and Clay Modeling
The Field Museum (two trips).....	History

SECOND GRADE

A Grocery Store	Industrial Study
A Truck Garden	Industrial Study
South Water Street Commission Market.....	Industrial Study
Fox River Butter Company.....	Industrial Study
Hull House (to see weaving).....	Handwork
The "Zoo" in Lincoln Park.....	Clay Modeling

THIRD GRADE

The Sand Dunes at Millers, Indiana.....	Science and Nature Study
Garibaldi, Cuneo & Company (wholesale fruit house).....	Industrial Study
Booth's Fisheries (cold-storage plant)	Industrial Study
South Water Street Commission Market.....	Industrial Study
Haymarket Square	History
Water Works Pumping Station.....	History
Boat Trip on Chicago River (to see harbor improvements and entrance to Drainage Canal)	History

FOURTH GRADE

The Sand-Dunes at Millers, Indiana.....	Science and Nature Study
The Art Institute	History
The Field Museum	Geography
Boat Trip on the Chicago River (to see the industries bordering both branches)	Industrial Study
Stony Island	Geography

FIFTH GRADE

In twenty-seven excursions, made chiefly by automobile, the following points of interest were visited in connection with the different subjects of study under which they are listed.

History—

Site of Ft. Dearborn; Columbus Memorial Building; Massacre Monument, 1812; Statue of Leif Ericson; Marquette Boulder Monument, Summit; LaRabida and Columbus Caravels; Washington Statue; Drake Fountain of Columbus; Statue of Columbus in South Chicago; Columbus Statue at Sixty-fourth Street and Wentworth Avenue; Chicago Historical Society; Water Tower, Chicago Avenue Water-Works; State-Line Monument; House where Great Fire Started in 1871; Marquette Build-

ing, tablets and reliefs; Central Trust Building, mural paintings; Marquette Cross, foot of Robey Street; Field Museum; Colonial Houses in Winnetka, Evanston, and Kenwood; Joliet Statue, Joliet; Statue of La Salle, Lincoln Park.

Physiography—

Sand Bar at Sinai Temple; Summit, Calumet, and Tolleston beaches; Riverside, meanders of the Des Plaines; Oak Park spit; Austin spit; Rocky Ledge Park; Calumet Beach on Parkway to Riverside; Glenwood spit on Des Plaines Avenue; Garfield Park Conservatory; Rose Hill sand-bar; Tolleston beach—Clark Street, Michigan Avenue, West Pullman; Mount Forest; The Sag; North Shore Drainage Canal; Blue Island; Washington Heights—beaches and sand-bar; Field Museum; relief maps; Cragin, Calumet beach; Mount Clair, Glenwood beach; Glenwood bluff at Winnetka; Stony Island, mountain-fold; County Line, ravines and Indian tree; Ravinia, lake shore.

Industrial Study—

Twenty-second Street lumber yards; Old lock of Illinois and Michigan Canal; Union Lime Works Stone Quarry; Grand Avenue Stone Quarry; Outcrop west of Palmer Square; Hull House Museum; Dutch Wind Mill on Des Plaines; Lockport Power-House and Canal-Locks; Tetzner's Warping Works; Flour Mill; Field Museum, exhibit of textiles.

Art and Architecture—

Fountain of the Great Lakes and park statuary; St. Paul's and St. Michael's Cathedrals; Fourth Presbyterian Church; Field Museum; German Building in Jackson Park; The University of Chicago buildings; Buildings of the Illinois Athletic Club and University Club.

SIXTH GRADE

The Art Institute (to see exhibits of water colors, Japanese prints, statuary, pottery and handwork) Art
 Lincoln Park (many visits to conservatory, bird and animal houses, grandmother's flower-garden, etc.) Science, Art and Geography
 Jackson Park (to see Wooded Isle, Columbus caravels, La Rabida, etc.) Science and History
 Hull House (to see exhibits of textiles, spinning and book-binding).... Art
 The Kalo Shop Handwork
 Burley and Tyrrell Co., Pottery..... Handwork
 Pushman Brothers, Oriental Rugs..... Handwork
 Newspaper Office of the *Chicago American*..... Civics
 Meeting of the City Council..... Civics
 Life-Saving Station Civics
 The Polls on Election-Day..... Civics
 Engine-House of the Fire Department..... Civics
 Illinois Brick Yards at Purington, Illinois..... Industrial Study

The Bristol Mineral Springs Company.....	Industrial Study
Illinois Vinegar and Yeast Company.....	Industrial Study
John F. Jelke & Company (manufacturers of butterine)....	Industrial Study
The Ward Baking Company	Industrial Study
Sub-basements at Marshall Field & Company.....	Industrial Study
Ice Plant of The Consumers Company.....	Industrial Study
Lindsay Light Company	Industrial Study
Land Show at the Coliseum.....	Industrial Study
J. E. Tilt Shoe Company.....	Industrial Study
Northwestern Terra-Cotta Company.....	Industrial Study
Yerkes Observatory at Williams Bay, Wisconsin.....	Science
The Chicago Academy of Sciences (many trips).....	Science
Peterson Nursery	Science

SEVENTH GRADE

The Sand-Dunes at Millers, Indiana.....	Nature Study
Marshall Field & Company.....	Industrial Study
Donnelley & Company (printing plant).....	Industrial Study
Newberry Library (illumination of books).....	Art

EIGHTH GRADE

The Drainage Canal to Lockport.....	Civics
Winnetka	Physiography
Village of Gross Point.....	Physiography
Mount Forest Island and Sag.....	Physiography
Cragin and Galewood	Physiography
Thorne Creek	Physiography
Worth and Palos Park.....	Physiography
Stony Island	Physiography

HIGH SCHOOL

General Science—

- Fifteen excursions to typical localities in the Chicago region, such as:
- Beverly Hills, Stony Island, Mount Forest, Glencoe.
- Theater to see *Salisbury's* Moving Pictures of Wild Life.
- Theater to see *Williamson's* Submarine Moving Pictures.

Domestic Science—

- Bowman Dairy Distributing Station in Chicago.
- Bowman Dairy Receiving Station, Barrington, Illinois.

Physics and Chemistry—

- Gas-Plant of the People's Gas Light & Coke Company.
- Power-Plant of the Commonwealth Edison Company.
- The Illinois Steel Company, South Chicago.
- The Universal Cement Works, Buffington, Indiana.
- The Standard Oil Company Plant, at Whiting, Indiana.

The Illinois Vinegar and Yeast Company.
A Central Heating Station in the Downtown District.
Ice Plant of The Consumers Company
Thomas J. Dee & Company (metal refiners and assayers).

Commercial Geography—

The Union Stock Yards.
The Wisconsin Steel Works. South Chicago.
The Standard Oil Company Plant at Whiting, Indiana.
The Chicago Board of Trade.

Literature—

Theatre (to see Sir Johnstone Forbes Robertson in *Hamlet*).
The Art Institute (to see Mr. Samuel Hume's exhibit of modern stage craft).

Current History—

Lecture on *Women and War*, by Mme. Rosika Schwimmer of Budapest.
Hull House.
Theater to see *Uncle Sam at Work* (moving pictures).
Hearing of Federal Commission of Industrial Relations.
The Art Institute to see Exhibit of American Artists.
O'Brien's Art Gallery to see examples of contemporary Spanish Art.

French (special class)—

Lecture: *M. Eugene Brieux* by Mme. Brugnot.
Lecture: *The French Theater* by M. David.
Theater to see *Suzette*, one-act play by M. Eugene Brieux.
Lecture: *Contemporary French Theater* by M. Eugene Brieux.
Lecture: *Romain Roland* by Mlle. de Lagneau.
French Protestant Church service.

German (twelfth-grade class)—

Theater to see *Minna von Barnhelm*.

Clay Modeling—

The Art Institute (to see Arts and Crafts Exhibit).
Marshall Field & Company (to see Syracuse Pottery Exhibit).
Studio of Mr. Mulligan and Mr. Taft.

Metallurgical Work—

The Art Institute.
Thomas J. Dee & Company (metal refiners and assayers).
The Kalo Shop.

Artist Recitals (Music Department)—

Mrs. Robert McInness, piano.
The Misses Fuller, folksongs.
Mme. Melville Liszniewska, piano.
Miss Amy Emerson Neill, violin.
Mr. Ludwig Baur, bass.

great beautiful elms, with basswood and a few maples. At length his gravel road almost suddenly ends. He is walking on clay. "Aha," says Waldo, "just as I expected." The trees are oaks. There is a ridge, but it is sharp and steep. It grows sharper and steeper. "Only waves could have cut this cliff," says Waldo. "The flat where I am walking must have been a beach. The cliff, I see, is glacial clay and boulders. Here, from this post hole, I confirm my suspicion that I am walking on beach-sand and gravel." He turns to his right, goes down a steep cliff, exactly similar in outline to the other, and is on the present beach, where the waves are repeating the process of ages ago.

Has not this conception, that every landscape has a past and a future, added meaning and beauty to Waldo's world out of doors? Has not this notion of great forces working slowly, steadily, through endless ages, widened his horizon? Does not the intellectual activity that made him want to tramp along until he found out the rest of the story provide a wholesome corrective to a slavish dependence upon books? This is power, not information. This is thinking in terms of evolution.

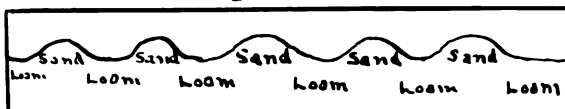
"Gee, I wish," complained Frank, "that I could have been alive a hundred thousand years ago, to see whether this canyon started as a cave, and the roof fell in, or started as a creek on top of the ground." And after a pause, "Yes, and a hundred thousand years from now, to see whether it ever cuts down to ground water and gets a stream of its own and some tributaries." Such thinking is stimulating to the imagination. It is, moreover, possible for the boy to whom books are rather meaningless, or to him who cares little for other forms of expression. This pleasure satisfies him. He feels himself thinking. It involves physical effort and mental effort. This is real pleasure. If this boy, when he has an afternoon, says, "Let's go to the river," instead of "Let's go to the movies," something has been gained.

In the field ideas take form. Dullness and mistiness and bewilderment are dispelled by the clear light of actuality. The children are alert, often very gay, in spite of some hardships. One misty day, I remember, we went to Cragin and Galewood, "Our Famous Excursion to Mudville," the children always designated it. We had luncheon in a half rain, near the village of Cragin, on one of a remarkable group of small spits, driven off from a bar which afterwards became the Calumet shore-line. Each of these little spits

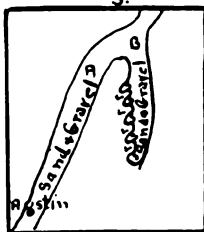
Skinned Diagrams. Margaret Ruby.



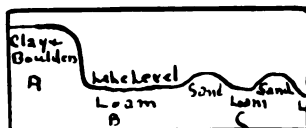
Sand bar made in Calumet times.



These are five little spits like number one.



We could not see no. 3, but the 5 fingers are the 5 spits and H is the main bar. B is a spit. These were all built in Calumet times.



A is glacial drift. It is the old Glenwood shore line never covered by water. B is where Lake Erie - ago flat. C is the main bar and a spit.

PROFILES DRAWN IN THE FIELD ON CRAGIN EXCURSION

rises very slightly above the surrounding plain. Each is characteristically marked by a line of scrub-oaks—significant little groups of trees in an otherwise treeless plain. On the main ridge is a road, along which the oldest houses are built. The ridge afforded elevation, drainage and trees, and our maps showed that the location of Austin, also, further to the southwest, had been determined by these advantages.

From Cragin, despite uncertain weather, the class went on to Galewood. The car at the end of the line climbs a fifteen-foot hill. As far as we could see, northeast and southwest, this hill met the flat

plain of the old lake-bed. A few steps from the car line a clay-pit showed that we were on glacial soil. Here, evidently, was the border of the old lake—the Glenwood shore line. From here we were to walk two miles north to Dunning. (“Dunning will be full,” Paul said.) The class splashed good-naturedly along a country road. “Mudville Avenue,” they christened it. Gwendolen afterwards described it as “a boulevard between Galewood and Dunning, paved with rich, black, slippery, oozy mud.” Mudville Avenue runs as near as possible to the shore-line, and it was worthy of note that all the oldest houses were built at the top of the cliff, now indeed a gentle slope, but high enough to afford those early settlers air and view. Gwendolen averred afterward that the “boulevard had beautiful streams on either side, commonly called ditches,” and that “if you had good eyes, you might be able to discover a footpath between the ditch and the mud.” Turning these good eyes to the left, we saw vegetation, and the irregular topography of the border moraine. To the right was the seemingly abnormal flatness to which the waves of the old lake had reduced its bed. Gwendolen’s further statement that every few minutes some attentive student, gazing upon these things, gave a shriek, clutched at a bush, and disappeared into a ditch, only goes to show the philosophical attitude of a class in the field in the face of genuine handicaps. The map showed that the elevated land was once a long narrow peninsula, lying between old Lake Chicago and a bay, now occupied by the valley of the Des Plaines river. From the southern point of this peninsula, the children reasoned that a long spit must have been built by the waves and current, and their map showed the town of Oak Park built on this spit. They announced that the next day they should have to stay at home to clean their shoes, but if keeping their eyes on topography so plain as this caused them now and then to stumble into the mire, it is not to their shoes alone that some memories adhered.

That memories do adhere to their minds could be shown most convincingly by the children’s own papers, but physiography excursions have for their purpose the opening of the ears to hear “the songs of the universe,” opening of the eyes to read “the manuscripts of God,” opening of the minds to the great conception of mighty forces molding landscape, slowly, irresistibly. Such profound impressions few people can put into adequate words. No child could do it as a set task; or, rather, perhaps this is our great opportunity for

stimulating a certain form of imaginative and beautiful writing—an opportunity hitherto neglected. Perhaps Jimmy would have written a poem after that day in Bowmanville woods if we had nourished the habit of giving beautiful expression to stirring emotion. We had come out to see the enormous spit that terminates the Rose-hill bar, and the deep, rich, black loam where this spit cut off a bay and made a swamp. The deep, rich, black loam, on this spring day was a garden of beauty, alight with the most delicate blue blossoms of spring. All of us were happy, but Jimmy's face was filled with an unspeakable joy. If he could have written a poem that but faintly expressed what that sunlight, filtering down through the tender green of the young elm leaves into the depths of those flower-filled woods, meant to him,—even that lost poem would scarcely have taken account of the lake currents and storms of remote ages that made this beauty possible. Writing is not the natural, necessary expression of the result of the physiography excursion.

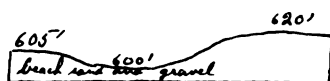
In preparation for such an excursion, a class must do close, careful map-work. Of course, in the field, they constantly use their topographic maps, but from the train are to be seen many important physiographic features. Here it is impracticable to call the class together. It is futile to point out these features unsystematically to the children who happen to be at hand. But every child who has spent an hour or more the day before tracing the railroad route, studying soils and contours, estimating distances, and writing car-window directions, is fairly certain to use to advantage his time on the train. Dorothy's paper shows what she intended to see from the train, on an excursion to Thornton, June 6.

EXCURSION DIRECTIONS

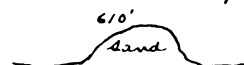
1. Between Auburn Park and Gresham, look west for Tolleston shore line.
2. One and a half miles west of Gresham, train crosses Calumet shore line.
3. Near Morgan Park, look for boulder deposits.
4. Near Blue Island, look west for Calumet shore line, and Glenwood shore line as a terrace.
5. At the end of the Blue Island ridge, look for sand and gravel.
6. Near Homewood, beyond the Calumet shore-line, look for peat-bog and sand-dunes.

Andre Alland
April 28 '15

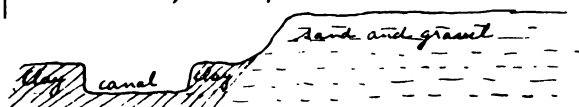
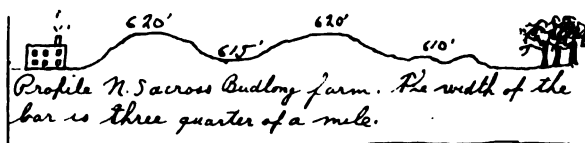
Profiles drawn on excursion



Profile east and west of Valmar on Riley St



Profile N-W & SE end of Bowmanville Ave.



Profile - End of Bar

PROFILES DRAWN IN THE FIELD ON BOWMANVILLE EXCURSION

If Dorothy checks in her notebook each physiographic feature that she identifies, so that on the return trip she can ask to have the others pointed out, there is no need for her to write a paper. By June 6 the class has seen all the shore-lines at divers points. Phyllis says: "Wherever we have seen the Glenwood shore-line, it was marked by a rise in the land. All the ground beyond was clay and boulders. The Calumet and Tolleston shore-lines are also marked by a rise in the land. Except where all the shore-lines come together, as they do in the bluff at Winnetka, these two are always made of sand and gravel. If you did not know the elevation, you could not tell the difference between the Calumet and Tolleston shore-lines, but as we always have our map with us, we have no difficulty."

Since we have our maps always with us, and our pencils and our eyes, there are more natural forms of expression for the mere facts observed than a written paper could be. When every one has picked up a handful of sand from the hill which the road cuts through, and

has noted that it is pure sand, without the smallest pebble, dune sand, he has a mental image of the wind piling up a sand-dune here when the lake was cutting a cliff at this point. When every one has shown, by a quickly-drawn profile, the abrupt change from the plain, flat as his palm, that the car has just passed over, to the varied topography and wooded area where our tramping is to begin, why need he put it into words?

We walk two miles east on a sandy road, past a cemetery. Abruptly the road changes to a natural macadam. An enormous quarry gapes before us. We sit down to reason together. The limestone here is at the surface. At the Sag also, forty feet lower in elevation, we have seen limestone at the surface. If all the ground-moraine and border-moraine could be removed, here would be a rounded hill of limestone, there would be a valley. Where were the other hills in preglacial times? Evidently where the rock is now quarried. What made these hills? Evidently erosion was the chief agent. How could you ascertain the topography of preglacial times? Evidently, again, from the depth at which limestone is found by well-diggers and excavators. It is a profound idea, this erosion by long-extinct rivers, before arctic conditions permitted the ice sheet to shave off the soil, cut down the hills, fill up the valleys, alter the drainage. Sitting on the crest of the highest of these hills, which formed a bold headland when the icy lake lapped these shores, we get the great thought as we scarcely get it in the classroom.

Thorn Creek, which is the end of our walk, is not merely a pretty little winding stream with an attractive bridge and a more or less picturesque and odorous old brewery in view. It is a little creek that has transported tons and tons of earth, as the high banks of its wide valley show. The luncheon place is not merely a fair plain, affording an excellent baseball diamond for those who have finished their milk and returned the bottles. It is also the flood-plain which the creek leveled off in Glenwood times. Here we have a terraced stream, now making a flood-plain at its new level. No sooner has every pupil sketched a profile of its cross-section than he recognizes its significance. It is identical with such profiles as that of the Colorado River, which he has made from the topographic map. Mentally he can reconstruct the V-shaped valley of its extreme youth, its slow change to a meandering stream, building a wide flood plain,

and its sudden renewal of youth, and repetition of its history, when the lake dropped.

A little farther down the stream there is a phenomenon which some of the class interpreted with astonishing promptness. It was a hanging valley. Evidently, in Glenwood times, the brook was meandering at the extreme right of its flood-plain. From this part of the creek, a tributary had cut back a considerable distance. The sudden drop of the lake gave the slow stream new swiftness and cutting power. It had straightened its course, abandoning the old curve, and left the tributary high and dry and distant.

There remained the anticline, in anticipation of which we had invented and made klinometers. "Originally," writes Fred, "the limestone was all in horizontal layers, and later some force pushed the rock from both sides, or from the middle, into a hill" (dotted lines in his diagram show a clear image of the ancient hill). "By a river, perhaps, the hill was worn to its present shape. We measured the angle of the rocks. It measured twenty-two and a half degrees. Then we went across the creek and measured the angle of the rock on the other side, higher up. The angles were nearly the same, and the rock at both sides slanted toward each other (*sic*), and it is sure that a hill was there at one time."

Fred's hill—those few, dingy, slimy, shelving stones on the muddy bank of Thorn Creek—was to him, with his sober conception of tremendous earth movements and long-continued erosion, "the foster child of silence and slow time." To him it told a tale more richly than any book could have told it. His expression of the tale is crude and childish enough, to be sure, but clarity of image is the first essential to clarity of expression and must precede any striving for beauty and elegance. And it is clarity of image that these excursions bring. Furthermore, they bring these clear images as the result of concentrated intelligence, painstaking labor, careful observation, physical exertion, and carefully-supervised study, for which every pupil is held strictly responsible. Let us not confuse this sort of work with a "soft" education. Education should afford pleasure, but I repeat that pleasure is the sense of satisfying one's ideal of himself, and that our chief problem is to make this a high and fine ideal. If the school, besides recognizing and nourishing the "insatiable desire of the human mind for knowledge" has nourished also a desire for intellectual power, a child's education will be a pleasure

as he sees himself gaining that power. If we smooth out all his difficulties, if we allow him to stop always just short of effort, then we do give a "soft" education indeed, involving a loosening of moral fiber. But children, happy in hard work and real thinking, furnish a most hopeful prophecy of the success of democratic education. Field work, to be sure, does not contribute the major part in this ethical training, but we believe that it contributes a most important element.



A PIONEER PARTY—A STUDY IN LOCAL GEOGRAPHY AND HISTORY*

The story of the third-grade study of Chicago as it culminated in the "pioneer party" for the parents is given here with the thought that the problem of local history and geography is universal. It will be noted that the selection of units of study was the plan adopted, and that the point of contact was found in the present needs and comforts of the child. From this point of contact, the children became much interested in the study of the food and water supplies of Chicago; and this interest opened the way for many kinds of activity—for invention, for experiment, for trips to points of interest in local history, geography, and industry, and for acquaintance with numerous stories and traditions connected with pioneer life. This was done with the belief that a chronological order means little or nothing to the third-grade child. True, he is passing from the fairy-tale age, but so slowly that he is still eager for the "Once upon a time," rather than, "One hundred years ago," for the reason that with his short experience he is unable as yet to form a judgment of the events that might happen in so vast a period as a century.

Such a study is even more feasible in smaller communities than in the complex situation of Chicago. For the teacher the problem of selection is smaller; for the child the unit of study is less complex, and the material is at hand in tradition and story. So many points of contact are available in such a study that, yearly, different phases of the work could be taken, as opposed to the stereotyped course of study in local history and geography, where each year the teacher must teach a certain group of facts regardless of the interests of the children, which may vary widely from year to year.

At the beginning of the third-grade work after listing many of the foods used by the families represented, it became evident that to many children the source of supply went no further than the automobile-truck that daily delivered food supplies to the home. With children of wider experience this supply came from a grocery or food supply house; but from where the grocery received its provisions be-

*This report has been prepared by Miss Josephine F. Leach, Director of the State Normal School, Toledo, Ohio, who until recently was a member of the faculty of the Francis W. Parker School.

came a problem. Some one volunteered the information that his father often went to the wholesale market for fruit, and it soon became evident that there were great establishments that supplied the local grocers all over the city with their provisions.

But even these great storehouses must have a source of supply, and with this problem in mind a visit was made to Steele-Wedeles' Wholesale Food House. Where do Steele-Wedeles get the food supplies that they sell to grocers? With pencil and paper in hand the children solved the problem to their own satisfaction, by listing the names of localities that they found printed on the hundreds of boxes, as they passed up and down the long aisles, hedged in by crates of foodstuffs from all over the world.

Note that the problem is said to have been solved to the children's satisfaction, not necessarily to the teacher's. This does not mean that the work was without direction. Each child was allowed to do his best alone, and when he had gained the information he wished, it was accepted by the teacher, even though imperfect in the form in which it was gathered.

Returning to the school after this visit the children listed these localities and found that the foods at the wholesale house readily grouped themselves into two divisions, those grown or made in the United States, and those that came from other countries. A more thorough grouping was then made, supplemented by pictures, cut and brought from home, from various cans and labels on packages, until a classification called "Domestic and Foreign Foods" was judged to be the best title for the division made.

While listing these localities and also in all the work that followed, the children themselves realized that they were hampered because they had to stop constantly to ask for the spelling of words that were needed. The spelling for these days was well motivated, for the children made the spelling-lists when the teacher put the question, "What words are needed before we can write an account of our trip?"

The children had an awakening during this grouping of foods. Many of them had hitherto accepted and eaten food with no thought of the great number of people who daily ministered to their needs. One child was especially impressed with the currant-cleaning machine he had seen at the wholesale house; books were consulted to find what had been done to the currants before they made the long trip from

Greece to America; and the result of his investigation was set forth thus:

We saw many currants at the wholesale house. Most of these currants grew in Greece. They are planted in vineyards, in long rows so they can be picked easily. Men and women go down the long rows, picking the currants. After the currants are picked, they are dried in the sun. When dried they are packed into crates. They are then shipped to other countries. At the wholesale house they washed and cleaned the currants, then packed them into small boxes and sold them to grocery stores.

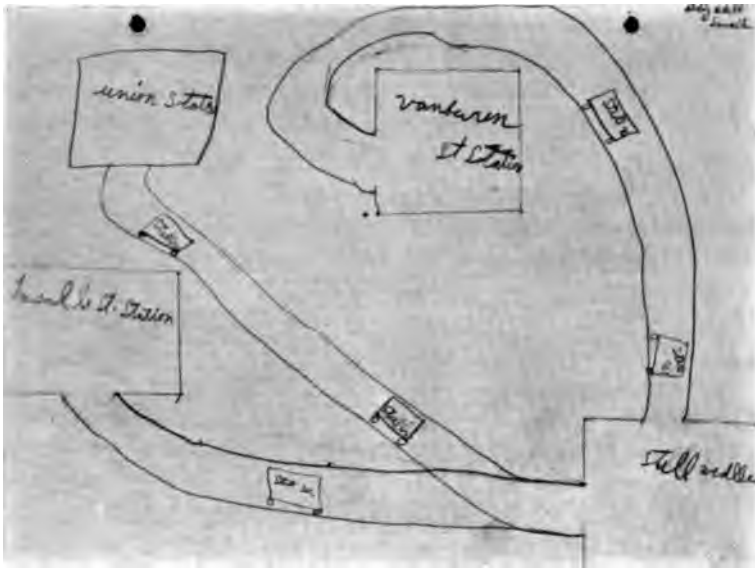
When the division of domestic and foreign foods had been made, the children made a further grouping of the foods they had seen on their visit, classifying them as meats, cereals, fruits, vegetables and beverages.

While at the wholesale house the visitors were taken in the elevator, far down below the surface of the street, and there given a glimpse of the freight switchyard. Here they saw many cars laden with food supplies. They were told by the guide that this switchyard led into the great freight subway of Chicago, that each car was loaded with food to be sent to some other city, and that each track led to a different railway freight station. Back again in the schoolroom the children began to search on a large map of Chicago for these various railway stations. When these were located, it was clear to the children that the great city of Chicago underground was a network of car tracks that enabled the city to receive and send away its foodstuffs.

In searching for these stations, a city map was found to be a complex affair. Once the stations were located, however, the children were asked to show "how Steele-Wedeles send their supplies to the railway freight stations of Chicago," and a simple plan (with no thought of scale) of one branch of the subway, with the switch-yard of the wholesale house as the point of departure, was the result. After consulting a city directory the children found that they had studied but one of many wholesale food houses in the city of Chicago, and that all were busy taking care of Chicago's food.

In all this study the children were gradually seeing that Chicago was very large and had to have many ways of taking care of its people. They had in a small way solved the problem of how Chicago takes care of its food question. In what other ways must a city care for its people?

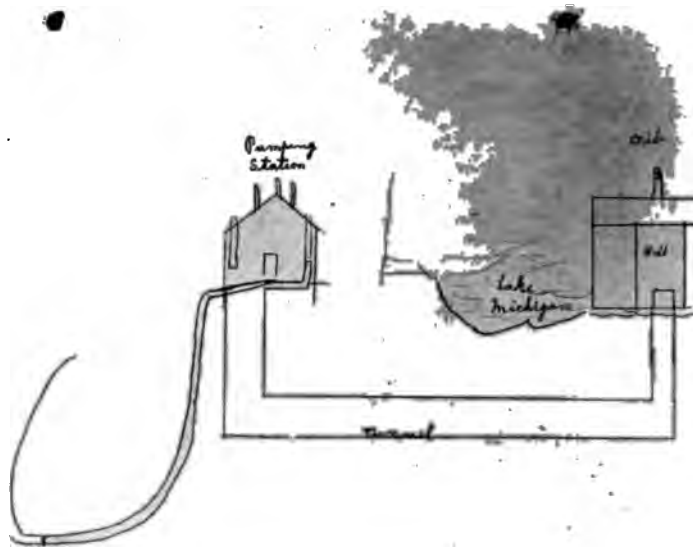
Such questions as how Chicago gets its water supply; how the



CHILD'S DIAGRAM OF FREIGHT SUBWAY

ity takes care of the health of its people; how Chicago protects people against fire, all became topics of conversation. Many topics were suggested by the children. However, after the food supply of Chicago had been discussed, the question of how Chicago gets its water supply, and how Chicago protects its people against fire were selected for further study. Many reasons could be given for the selection of these two questions. Both the water system and the fire department contained the human and dramatic element as the evolution from the days of Fort Dearborn were traced, abundant material was available, and the appeal of the fire engine is still strong to the third-grade child.

The problem of the water supply had its beginning within the child's experience. How is water brought into your own home, became the question. The water was traced underground through the streets of Chicago to the pumping-station. Many children knew of pumping-stations near their homes. How many stations were needed to supply the water for the city? Where to find this information was the next problem. Some suggested asking at home; others, going to a pumping-station, but at last the telephone directory was accepted as authority, and the question of the number was solved. But numbers meant



CHILD'S DIAGRAM OF CRIB AND PUMPING STATION

little unless it could be found how much water one pumping-station supplied. This was answered when one girl brought in the following written report to the class, after a visit to a pumping-station in her neighborhood:

THE LAKE VIEW PUMPING-STATION

I went to the Lake View pumping-station this afternoon. There were four pumping-engines. On Sundays they have two engines going because people do not use as much water on Sundays as they do on week-days.

I asked the man how much water they would pump today, and he said, "Fifty million gallons."

One engine would pump twenty-five million gallons a day, so on week-days the four engines pump one hundred million gallons of water.

Elizabeth G.

The construction of the water-cribs in Lake Michigan was next discussed; information was brought in from every source; old histories were collected at home; children sought information from parents and friends, and during the reading period, Miss Hall's "Story of Chicago" was read, discussed, and parts of it dramatized, until finally, to use the words of an observer who had watched the work as it progressed:

"Those children knew more than I ever expect to learn about the settling of the city, the growth of its streets, the drainage, the water-supply, etc. Not only did they know it, but it was vital to them. One boy voluntarily spent a large part of a morning making comparative maps of old and "now-a-days" Chicago, as he termed it, and another was so possessed with the idea and image of Fort Dearborn that he drew or chalked or painted it on everything he did."

Much more space could be taken in showing the further development of the problems set. The children were constantly gathering information, and valuable information always awakens a desire to impart it to some one. One of the children suggested having the parents come to school some day so that all these interesting things about Chicago might be told to them. The idea grew, and at last plans began to be made for a Pioneer Party to be given to the parents. Mrs. Alice Putnam, the kindergartner, had made Chicago her home since the days of Fort Dearborn, and the children were highly delighted to invite her as a guest of honor.

From the day the pioneer party was suggested all was excitement. The whole grade became a cluster of committees. One of these planned the invitations, which read as follows:

Dear Mother and Father:—

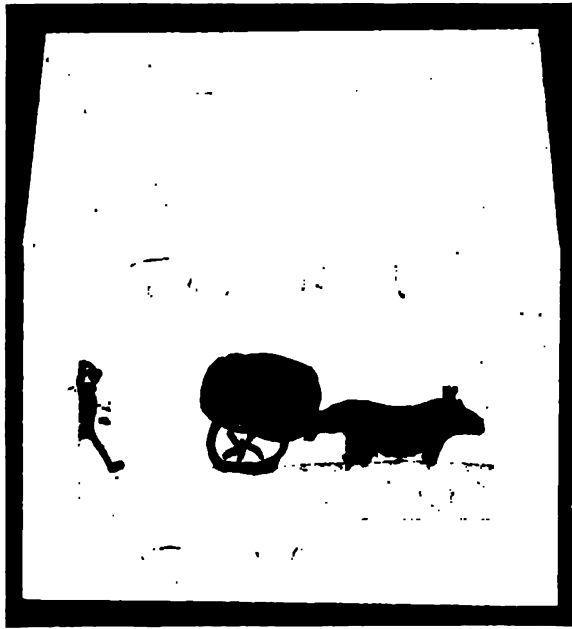
Tuesday afternoon, May 3, at 2:30 o'clock we are going to have a Pioneer Party. We want both of you to come. If you know something that happened in Chicago a long time ago, will you tell us about it?

Olga B.

The invitations were written, folded and then decorated with scenes from "Early Chicago." The envelopes were addressed, stamped, and each child had the joy of sending his own through the mail.

A program committee labored over the selection of material worthy to be given at the party. The members finally decided that each child should select some phase of the subject, such as Chicago's water supply, the early settlement of the city, the fire department, and should write out his material at home. The English period was used for a discussion of these papers. Three of the best, after much criticism, were given place on the program.

The refreshment committee after much deliberation decided to waive appropriate refreshments in the form of johnny-cake, and serve lemonade and cup-cakes. Another group of children folded and decorated the paper napkins with appropriate pioneer pictures.



INVITATION DECORATED WITH EARLY CHICAGO SCENE

The first real thrill came when Mrs. Putnam's acceptance of the invitation arrived. The children had asked the parents to tell interesting things about Chicago, and several came with pictures and rare old books, ready to tell of personal experiences.

On the eventful day all was in charge of the committees. Each child had some task to perform, and each felt such responsibility that he well knew the party would be a failure without his coöperation. That each child fitted into the scheme was evident when the refreshment committee returned from the domestic science kitchen and said, "Mrs. Webster says she always wants Robert to help, for he can squeeze lemons so that all the juice is saved." Robert's face beamed, for up to this time his part in the scheme had been doubtful. Now he had found his place.

The details of the party are best told in the accounts written by the children. The charades played were thoroughly enjoyed by both parents and children, as is evident from the following accounts given by two of the boys:

On Tuesday, May 5, our grade gave a pioneer party. We had many things to do, but I am going to tell you about the charades we gave. We acted five charades, Illinois, cabin, pioneer, Indian and Dearborn.

To play Illinois we had an ill person and a father. The father called a doctor for the ill boy. He came and gave the ill boy some medicine, then went away. Some boys then came and said, "Get up! It is time for school." But the ill boy said, "Don't annoy me, don't annoy me," and the father sent the boys away.



MRS. PUTNAM'S ACCEPTANCE

To play cabin, we had two horses hitched to a chair for a cab. Richard and James were the horses. The driver drove to a lady's house. Judy was the lady. She had called for him to come. The driver said, "Step in, step in" and the lady said, "I am in the cab."

Our parents could guess all the charades.

William C.

Tuesday, May 5, the third grade had a pioneer party. We acted out five charades, Illinois, cabin and Dearborn. Besides we had two puzzles.

We had an ear of corn with a pie made out of paper. The ear of corn was sticking through the pie, and the puzzle was pioneer. On the blackboard we had a big D cut out of white paper, with the word *an* written inside of it. The answer to this puzzle was Indian.

Robert H.

The awe, wonder and enjoyment that shone in the faces of the children as Mrs. Putnam told of childhood experiences in the old city of Chicago and around Fort Dearborn, was a fitting climax to the work each child had done in preparation for the event. Later, in writing an account of the party for the school paper, one boy made manifest the spirit that had animated the entire group all through the work. The boy had himself drawn the map of Chicago; and yet note the impersonal way in which he refers to his work:

THE THIRD GRADE PIONEER PARTY

The third grade had a pioneer party on Tuesday, May 5th. They had a lot of things there. One boy drew a map of early Chicago and one of now-a-days Chicago and explained them to the parents. Stephen wrote a paper on Early Chicago. He read it. This is his paper:

Early Chicago

"In the early time, Chicago was only a swamp, with a few Indian tents around the river. Trappers from Canada trapped the woods for fur. They trapped beaver, minks, fox and marten. These they traded to the Indians and made their living. The trappers were French. Shiploads of fur went back to France every year.

"Soon the English came and carried back the wonderful stories of Chicago. Some of them stayed and built houses and lived here. A young man and his wife who had lived in Detroit for some years came down on pack-horses, his daughter first, his wife second, and he came last. They trailed the woods for many miles. When he got here he bought a cabin. His wife and daughter set to work scrubbing the floors. He set up his bench in the corner of the room and began to make furniture for his house, for he had not been able to carry much with him.

"One day the Indians came to see their new friend, John Kinzie. He took them in and began to work with his silver, for he had learned to do it when he was a boy.

"It was a cold winter. In the spring they set to work building the fort. It was soon finished. It was all whitewashed. Some of the soldiers came by water and some by land. Then John Kinzie made a little veranda, and when Mrs. Kinzie sat on the veranda and looked across the river at the neatly whitewashed fort, she thought it was a protection.

"Soon a ship came into the mouth of the river, and everybody ran to see it. 'That ship must be bringing us help if we need it,' the people thought. But they were mistaken. Those men on board had a sickness, and they had

come to get well. The people outside were not permitted to go near the fort, but the soldiers were soon well, and everyone was glad.

"People along the river were taking up more land, and the Indians were almost crowded out. They did not like this and thought they would make war, so one day they attacked the white people. Everyone ran to the fort, and the people were kept in there for three months.

"One day news came that Black Hawk, the great chief, was captured, and this ended the trouble.

"Stephen R."

Elinor read her paper on Chicago's water-system. The boys and girls played charades and served refreshments. Warren told riddles about early Chicago. Just as each child was going to do his part, Alexis told what that child was to do.

Mrs. Putnam, our guest of honor, told many stories of what happened to her when she was a little girl in early Chicago. This is one of the stories:

When I was a little girl, Chicago was supplied with water from a water-cart. It was driven by a very big man. One day he asked me if I wanted to ride on the water-cart. I said, "Yes, I did," so he lifted me on the top of the cart, and I rode around the block.

This is another story she told:

The commander of the Fort Dearborn army had a little girl about my age. I used to visit her. There were some rusty cannon-balls in the fort that were never used. We made gardens and houses all of cannon-balls in Fort Dearborn. We had to put them back, but that was a part of our play.

This is the third story she told:

In the time of early Chicago there were no bridges. People used ferries. These ferries were strong ropes fastened at each river-bank. There was a little car running across on the ropes. One day the ferryman said to me, "Do you want to draw me across?" I said, "Yes." It took a long time to draw him across, he was so heavy, but at last I did it.

To the adult observer the pioneer party might have been a crude outcome; to the child who had a part in its achievement, it was perfection. The idea was to encourage self-expression, to foster independence, and to set a community or coöperative project so large that each child might have a share in it; to develop a sense of responsibility through a division of labor, for the child realized that his failure to perform some task assigned to him brought disaster to the pleasure of the entire group; whereas in a series of duplicate undertakings without the coöperative enterprise the child's failure affects himself alone.

THE SCHOOL MUSEUM

The museum holds an important place in the scientific life of a school. To be sure, it is of subsidiary importance as compared with a collection of scientific specimens in their natural habitat out of doors, but it has the advantage of being always available, and of presenting material in a concentrated and unified form.

The modern museum is seeking to add the naturalistic flavor by setting forth its contents in habitat groups. By this means the specimen is taken from its isolated position and put down in close relation to its natural neighbors, among which its real significance may be more nearly appreciated. For a school museum, then, the need is to present material in a natural way.

In addition, the museum should be related by personal ties to the life of the school. A striated boulder collected on an eighth-grade excursion bears a vastly greater significance than one shipped in from a moraine in Iowa. And a vireo's nest collected by Lizette during her summer vacation means far more to her fellow-pupils than the more beautiful nest of a weaver-bird from Africa. Self-activity, then, is of utmost importance in the gathering together of a collection of specimens for a school. In many cases, materials used in the work of the grades are those prepared previously by the children of the school. Examples of this sort of coöperative work are a series of bottled samples showing the different stages in the manufacture of flour, cards with dyed cloth, and samples of the dyes and mordants used, bottled soils with data showing the composition as determined by the children, and pressed and mounted specimens of wild flowers. Too much emphasis cannot be placed upon the value of work of this sort. And its products, though often crude, have a truer place in the school museum than other kinds of specimens.

To be associated closely with the life of a school, the museum must be so placed as to command more than casual observation. Its isolation in an unfrequented room cuts it off from any natural use; and its position in a corridor may go quite to the other extreme, the very intimacy of its presence giving it no more significance than the walls and furniture. Plainly, the ideal location for a museum must

be a compromise between seclusion and conspicuousness, between aloofness and familiarity.

Our museum is moderately well constituted, both on the bases of naturalistic arrangement and of personal association. It is located in the corridor of a second floor, through which a large part of the school passes many times daily. It is as successful a formal exhibit as one may usually find in a school. The question as to how it may



HALL EXHIBIT OF SPRING FLOWERS AND BIRDS

come into a fuller relation with the individual pupil has led to the adoption of the following practice. Each week there is prepared a special exhibit which is placed on a table near the main entrance in the lower hall. The exact position may vary, as may the time of appearance. Thus the factor of position is made more efficiently favorable. The material of the exhibit is selected on the basis of seasonal interest when possible. This selection is particularly fortunate in the case of birds, insects, and plants. The blue jay and downy woodpecker are in close focus for a January exhibit, while the warblers and flycatchers take their places in May; the early buds and blossoms have a real significance in March, which is shared later by the various spring flowers which are available to the Chicago region. These may

be brought in by the children from excursions or from holiday trips. The selection of an exhibit may likewise be based upon its relation to the regular science work of the grades. If the fourth grade is studying volcanoes, their appreciation of the subject may be furthered by the realization that the whole school is looking at igneous rocks in a hall exhibit. The study of ore and ore-deposits in the eighth grade leads naturally to an exhibit of ores, especially since



THE CORN-PRODUCTS EXHIBIT

Victor has brought in a number of specimens of sphalerite which he has secured at a zinc smelter.

Grade science work draws extensively on the materials of a museum for illustrative purposes, and the presentation of similar specimens to the school as a whole should give the subject under discussion a seemingly more cosmopolitan significance. Among the calls for specimens from the museum in the course of a year's work, the following may be mentioned. The first grade has need for the Eskimo and Indian curios, as well as for samples of the common rocks; the second grade uses samples of grains, and birds; the fourth requires specimens of igneous rocks, and textile and food products, to be used in connection with the study of geography; the eighth grade makes constant use of rock specimens; the high-school classes in chemistry and commercial geography take advantage of industrial

exhibits to illustrate the methods of preparation of corn-products, salt, mineral oils, and cotton.

All specimens of the special exhibits are labeled plainly and frequently have in addition a short statement purposing to stimulate interest or to emphasize importance. If by this means the "out of doors" may be brought close to the lives and thoughts of the pupils, if by an association with more or less artificial material the true significance of the natural may be made clear or emphasized, the school museum has gone a long way in fulfilling its purpose.



CARE OF ANIMALS AT SCHOOL

"I think it's mean to wish the bees on the kindergarten for pets. They can't have near the fun with the bees that we can have with Billy," was the comment of a fourth grader, hitching up the fourth-grade goat for his daily stroll along the borders of Lincoln Park. But in spite of the fact that there can be no pleasurable personal contact between the kindergarten and its pets, there is an observation-hive in the kindergarten room where the children may see the bees working during the fall and spring. Watching the bees' activity is merely an incidental part of the kindergarten work. The children, of course, have no share in caring for them. All during the winter months, the bees are hibernating away from the kindergarten room, but with the coming of spring the hive is returned and the children watch through the glass sides of the hive the bees bringing back pollen from the park flowers.

The special pets of the first grade are doves and fishes, but they have other pets occasionally, such as tadpoles, turtles, and crayfish. In taking care of these living things, the children gain some sense of responsibility. John said, "It is only my business to take care of the fish, but I know how to take care of the doves, too." The work is always sought after and seldom neglected. During the nesting season the doves are watched with much interest, for the father-dove takes an active part in sitting on the eggs and feeding the little ones, and as they grow very rapidly, they require a great deal of attention. Giving fresh water to the fish, and watching them devour the bits of food thrown to them is always enjoyed, but real amusement is derived from a visit from the mother Crayfish, for it is such fun to see her sweep the air with her antennae or nip a pencil in her great clumsy claws, or take her food in them and push it into her mouth with little mouth-feet. The children love to watch her as she walks backward, and look at her with wonder as she draws in her bead-like eyes if she thinks danger is near, or pushes them out to see if she can escape. The most curious thing of all is the neat little nest which she makes by curling up her tail under her. Sometimes the clay models of animals are very much alive in the imagination of the first-grade children. One day Robert had made a "great" walrus

of clay, and had put it in the sea in the sand table. He said, "Now there will be something doing, since my walrus has come." Benjamin replied, "Well, something will be doing when I put my killer whale in there."

The rabbits are taken care of by the third-grade children under the supervision of a teacher. Two children are appointed to the rabbit committee and then make a report to the grade each week. One of the earlier "reports" bears the title *Rabbits*, and is as follows:

We have Rabbits. The hutch was wet and they were not to be seen. There is a tunnel that leads to a house underground. We called them. The straw was on the floor. John and I had put in foods. I had brought cabbage and they jumped around me. When I put it down, they jumped at it and ate it.

One journalistic third-grade child writes:

Third-Grade Rabbit News

Our rabbits have cute and cunning ways. One day when I went in their pen, I found that they had gnawed at the timber of the door, and at the strip of the wood that kept the door from going in too far. Once we put in a lot of straw. The next day when I came in, it was all gone! They had eaten it all up.

The rabbit news does not always come in this dramatic form. Many reports take the diary form.

Our rabbits were so glad when we came back from vacation. When we came to the door, they jumped up on us, and they were so hungry they could hardly wait. When I opened the door, one of the rabbits ran out and I could hardly catch him, and he had quite a little run. At last we got him into the pen.

* * * *

We got the rakes and cleaned the pen and put the fresh hay in. I enjoy taking care of the rabbits very much.

* * * *

When we went out to the rabbits, they were as lively as ever. We gave them two boxes of oats, so that if they should be fed late they would have enough to eat.

Another diary, somewhat later, goes as follows:

When Jean brought the food from the kitchen it was lettuce. And oh! how those rabbits did eat. We could hardly keep them away while I cleaned the pan.

* * * *

Today the rabbits were so funny. They would march around the hut

Thursday

We fed and watered the goat and ran him.

Friday

We fed and watered the goat and ran him.

* * * *

When I was on the goat committee I had a better time than I thought I would have. Stephen Robey and I was on the committee. I was glad to have Stephen on the goat committee because Stephen is one of my best friends. We took turns in carrying water and we fed him every day. Once in a while we would forget who got the water the day before. When such a thing would come up, we both would get the water and we would start all over again. Before we knew, the week was over and that was the end of our turn.



THE GOAT AND HIS ATTENDANTS

Since the beginning of the year there has been a great growth in the children's affection for the goat: it has developed in some cases to the point of jealousy. "I think Billy likes Roberta," remarked the generous Helen. "Oh," Eleanor answered pettishly, "that's only because Roberta wears a plaid dress every day." William, with a mind for philosophic truth, after looking for a long time at the goat, once stated gravely, "You know, I like Billy a lot, now that I'm acquainted with him." And Roberta, whose attraction for the goat had been questioned, murmurs daily, "I do love Billy."

has grown fatter, and we ought to fix his knees. He is a nice goat. His horns have grown longer.

* * * *

The first day Rudolph and myself were sent in to get water. When we got back, the goat and the girls were running along the sidewalk into the school grounds. Next day Miss Greenebaum sent me in to ask Percy for a box. I did not know where to find one, but Roland went and got a big clumsy box which Miss Greenebaum did not approve of, for she said it had a top on, and it ought not to have a top on. Roland and I took it back, but could not find a topless box. The next day I could not go to recess, but the day after, when Miss Greenebaum, Eleanor and myself went into the park, we could only go to the curbstone, for the goat lagged back, and Miss Greenebaum had to slide him by the horns, and he kept saying "Ba-aa-aa." Next day I noticed that his footprints looked like that of a deer. When we came back, Eleanor saw that the goat's water had frozen. I ran hot water on the ice and it took a strange form. I threw the loose piece of ice on the ground, afterwards getting fresh water.

* * * *

We fixed the barn up and cleaned it up on Monday. The goat jumped over the gate when he saw us coming with his food. The wagon is broken because it is not strong.

* * * *

When Louise and I had charge of the goat we took him out for a walk almost every day. We took him up to Fullerton and back through the park to school again. Every day we gave him fresh water and some fresh oats. Then we cleaned the goathouse and hung the harness up on a nail after we had taken the goat out for a walk.

* * * *

The goat got a bad sore on his side, and the wagon is broken, and we ought to tell the third grade not to throw stones or snowballs. Everything is all right in the goathouse, except the boxes ought to be moved.

* * * *

Monday

I got the water while Helen fed the goat. I drove him over to the park and I drove him back. He did not like to leave his house, so, going over, we had to pull him, but going back he went so fast we had to run to keep up with him.

Tuesday

Helen got the water while I fed the goat. We took him over to the park. Helen took him back and I took him over.

Wednesday

I got the water while Helen fed the goat. We took him over to the park.

Thursday

We fed and watered the goat and ran him.

Friday

We fed and watered the goat and ran him.

* * * *

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That there is a moral and a social motive in this sort of work is the reason for its being undertaken in the school. In Vol. I of the *Year Book* Miss Enoch's article on *Care of the Chickens* expresses the general pedagogic principles which apply to the care of animals in the school. In the work throughout the grades there is a concerted effort toward developing the social virtues. It is made of course without obviousness, and to the children the care of animals seems a natural part of the school work. The first grade use the animals in their regular activities; they draw pictures of the doves and model in clay the sea animals. Charming water-colors of the fish, they make, too, and formal stencil designs of birds or fish for the curtains which decorate the room. It seems that first-grade children must accept as part of the school environment these creatures, and take them without further analysis. This is true of the second and third grades. The fun of caring for the chickens and rabbits is so engrossing that pedagogic motive is probably unquestioned by the children. In the case of the goat, expediency is the answer to the question which comes forth: "Why do we have to take care of the goat?" "The school accepted him as a gift, and someone has to take care of him," is not a very profound answer, but so far has proven satisfactory. So long as the aspect of the care of animals does not seem strange and queer, the benefits are great to the children. They acquire a sense of administering real things from ordering food for the animals, and from managing the arrangements having to do therewith. Their intimacy with animals develops a sense of responsibility. The work on committees furthers the comradeship between the children which has a dignity greater than that gained on the playground, because it is based on serious constructive work. Perhaps the highest good that comes to the children is the opportunity to know animals. They develop an interest that is more than passing. One of the little boys, a wild, rather unruly child, became so fascinated by taking care of the chickens in second grade that during the summer he saved money from his allowance, foregoing the pleasures of easy-spending, to buy chickens for himself. All during the next year he cared for them conscientiously and earnestly. The growth of serious purpose, the quality of altruistic interest in live things, is the greatest contribution to the child which this type of work can give.

THE PUPIL'S EXPERIENCE AS THE SOURCE OF HIS PROBLEMS IN ARITHMETIC

In attempting in this school to utilize the sense-impressions and imagery of the individual pupil in the teaching of arithmetic, we have not only drawn upon the fund of objective experience which is common to all children in their life outside of the school room, but have endeavored as far as possible to make use of school activities and experiences of the children which incidentally entail a large amount of mathematical work and supply a body of imagery that becomes the basis of their mathematical knowledge.

Utilizing objective experience and imagery of the individual pupil in arithmetic applies both to the formal phase of the subject and to the selection and solution of applied problems. It would be a very exceptional and backward school which today did not attempt to rationalize the tables, formal processes, and rules of arithmetic by providing opportunity for each individual pupil to discover or formulate these for himself out of his own concrete experience. It has been the ideal, since the time of Pestalozzi, thus to free the pupil in the formal work from the mere slavish following of rules, by building, through objective teaching, a body of imagery in his mind upon which the processes of arithmetic are rationally based. But has the ideal prevailed in the selection and presentation of the problem material of seeing that the pupil is really provided with adequate experience and imagery for its interpretation?

In order to make the applied problems of arithmetic concrete to the pupil, they must be made to relate to his own activities and experiences. The trouble with the problems of textbooks is that they are not local in character and do not appeal to the experiences and interests of the individual pupil. They are written for use throughout the whole country, and hence must be of only general appeal. Furthermore, many of the problems of most textbooks are mere puzzles, and not the real problems that are encountered by any one in actual life. The chief danger lies in the fact that the textbook problems are to a great extent the problems of adults and not the problems of children at all. They deal with the business of the adult's world, and with matters with which children have as yet had no contact. The imagery

necessary for their interpretation is not possessed by children, because of their lack of experience with the things with which the problems deal. This is what makes the interpretation and solution of applied problems so difficult for children. The inference is inevitable. If the problems of arithmetic are to draw upon the imagery of the pupil, the textbook must be supplemented by problems that are local in character and that have to do with the pupil's own activities.

There is another weighty reason for the problems of the textbook being supplemented in every school and in every community by local problems of personal appeal to the pupil. In practical life the problems which one encounters are not already formulated and printed, but are involved in practical, concrete situations. Success in practical life, then, demands that he who faces a problem shall first interpret the situation involving it and formulate the problem for himself. It is training in this power, rather than in the power to interpret an already formulated problem, that is needed. We need to teach the pupil the art of problem making as well as the art of problem solving.

It follows that if the fundamental principle of "learning to do by doing" is to be applied in the teaching of arithmetic, pupils must have opportunities of acquiring the ability to interpret and formulate their own problems from concrete situations by *practicing* work of this character in the school. Training in the solution of book problems alone will not develop this ability. That this is a significant truth is attested by the universal complaints of business men that boys and girls who are the products of the public schools cannot put into practice the knowledge which they have acquired. They are trained to do one type of thing and in practical life are called upon to perform another. It is evident, therefore, that the school life of the pupil must include activities which involve a great deal of mathematical experience and imagery, and which demand incidentally the formulation as well as the solution of arithmetical problems. This mathematical experience should parallel and supplement the textbook work.

The following examples show how the children in the second grade formulated and solved problems connected with school activities in which they were engaged. Thus, these children were personally caring for chickens at the school. The problems about chickens, eggs, and chicken-feed grew out of this personal experience. The problems about looms and rugs also were formulated while the children were engaged in making looms and using them in weaving rugs.

My father brought me two dozen little chickens. I was down town and I said to my mother, please buy me some more chickens. She did and there were four dozen. Altogether I had forty-eight little chickens.

Alice.

I had 16 eggs and the hen could not sit on so many eggs, so I took from her 4, and how many did I have left? 12.

Sophy.

I had a bag of grain that weighed 20 ounces, and a rat came and ate 10 ounces. It left 10 ounces.

Frances.

I wove a rug which was twenty-six inches long. I had to take out two inches. How many were left? Twenty-four inches long.

Alice.

I had 12 balls of yarn. I wove 4 balls of it. How many balls did I have left? Eight.

Janet.

I had a rug. I made a camel in the center of the rug. He was 10 inches high. I made a mistake. I had to take 7 inches out. How many inches were left? Three.

H. P.

We made looms in school for our rugs. We needed 35 nails on one side. Yesterday I put in ten. I will need twenty-five more.

Katherine.

I had 47 nails in my loom and Miss Dewey said I could not have so many nails. I took out 12 of them. How many are left in my loom? Thirty-five.

Anna.

Many of the activities which the school should use as a natural basis of arithmetic work are those in which the pupils are engaged outside of school. We believe that it is the foremost function of the school to teach the child to do efficiently, or better than he could do without such guidance and instruction, those things which he is trying to do and wishes to do in the home, in his play, etc. This it can do only if it utilizes the child's own experiences and activities as the basis of teaching. Such appeal to the pupil's present activities not only enables him to do better those things which make up his life in the present, but also provides the best kind of development as preparation for his future.

Among the free activities of children outside of school that may thus be continued in the school room is the playing of various kinds of games, which is the main business of childhood. These games are of several different types. Some involve the principle of contest, and include various scoring games. Others involve imitation of real community activities, such as keeping store, playing fireman, etc. Other games are primarily games of activity, such as, "Pussy wants a

corner." The idea of utilizing so-called number games in school is now generally accepted, and this type of mathematical work is done in many schools. This form of activity has been utilized in our school to a greater or less extent in most of the elementary grades.

A discussion with our third-grade children of the kinds of mathematical experiences or activities which they engage in outside of school revealed the fact that most of them are provided with allowances of money by their parents. This illustrates another type of quantitative experience of children outside of school that might be made the basis of mathematical work in the classroom. A great variety of problems and drills may be devised that will make the children more efficient in their use of these allowances, and at the same time make them more proficient in certain formal work of arithmetic. Thorough investigation by the teacher of any grade should reveal many such quantitative experiences of children which might provide a body of concrete problems and drills based upon the children's active personal interests, such mathematical work possessing the highest value in that it helps the children to live more efficiently the lives which they are trying to live in the present.

The correlation of arithmetic with the other subjects of study, such as handwork, household arts, elementary science, and geography, provides, of course, a rich fund of objective mathematical experience and imagery. In addition to the foregoing, in this school more or less extensive projects are carried on in different grades as part of the regular school activities which afford admirable means of learning arithmetic by using it, and of building up incidentally a body of mathematical imagery which the pupil does not bring from outside of school.

Some projects or activities in our school that involve the building of mathematical experience and imagery have been described from other points of view in former volumes of the Year Book. Among these is the care of a number of chickens at the school by the children of the second grade, described in Volume I. That report shows the character of the number work involved in this grade activity. In the same volume is an article describing the building of a "club house," or play house, as a project of the eighth grade. That report indicates how the children of the eighth grade learned the relation between the sides of a right triangle, and mastered board measure and square

root incidentally as a part of the project. Other articles in the present volume, while written from a different point of view, show still other examples of activities in the school involving a large body of arithmetic work based upon real experience. See, for example, the article on the study of foods and food supply. See also the article on banking by the pupils of the seventh grade.

The activity described in the last named article is illustrative of a type of activity that may be provided at many points of the arithmetic course. It consists of a dramatization of business processes. Many of the topics of business which must be taught in the elementary school are beyond the experience of the average boy or girl, especially the latter. For example, the dealings with a bank, borrowing or lending money at interest, discounting bills, or dealings with stocks or bonds, are matters with which pupils of the elementary school have had little or no vital contact. If these topics are to be taught, it is imperative that the school shall provide the experience and mental imagery which are lacking. One way to supply these is to take the pupils on excursions to visit banks, business houses, brokerage offices, etc. But this alone is not sufficient. The most effective way is to apply the principle of "learning to do by doing" by having the pupils perform the business processes in make-believe fashion. Thus, in the third grade they may operate a make-believe city gas company, electric light company, or water company, and pay their monthly bills at the "office" of the company. In the fourth grade they may, as our fourth grade has done, conduct a store, and write, compute, and pay for bills of goods at this play store, etc.

This school conducts a store through which the pupils purchase practically all of their supplies, such as books, writing tablets, pencils, erasers, drawing instruments, etc. It conducts a lunch room also, at which the lunch is paid for by lunch tickets. In order to avoid the necessity of the children carrying spending money, the parents of all pupils are required to keep at the school a deposit upon which the pupils draw by checks in making purchases of supplies or lunch tickets. This constitutes a school bank account, and is operated like a real bank of deposit. Each pupil is given a check-book which provides blanks for carrying forward his balance from stub to stub. Monthly statements are issued as at a regular bank. Pupils whose balances do not agree with those of the bank are required to find their errors and correct them. The process operates in all grades above the second.

In the first and second grades, the teachers have to fill out the checks for the children. This plan gives all children above the second grade not only knowledge of the use of checks on a bank of deposit, but a large amount of practical experience in computation throughout their school course. It has the special value that the activity is genuine and not artificial in any sense, that it is motivated by the vital personal activity of each pupil, and that it affords a body of mathematical experience extending continuously throughout the elementary and high-school life of the pupil.

The chief effort in the teaching of number in the lower primary grades of our school is given to building, through various forms of purposeful activities of the children, a body of mathematical imagery that shall form a basis for the formal number facts and of the problems. The general character of this imagery-building may be indicated by the following outline of some of the sources of mathematical experience in the second grade.

The care of chickens at the school and the sale of the eggs by the children of the second grade, to which reference was made above, provide a large fund of experience running throughout the year. This includes buying and paying for the feed, measuring out and feeding the chickens the daily ration, collecting and selling the eggs, and making and repairing various articles used in and about the chicken quarters. The latter develops a working knowledge of the foot rule and yardstick. Each day the children take to the henhouse a definite quantity of grain. When a new fifty-pound bag arrives, it is delivered to the class-room, and before school each day an appointed child weighs out the daily ration. This power is developed during class drills, when the children learn to handle and name 1 lb., $\frac{1}{2}$ lb., $\frac{1}{4}$ lb., $\frac{1}{8}$ lb., and $\frac{1}{16}$ lb. weights. During the winter and early spring the children conduct an egg store in the lower hall of the building, selling the eggs on hand each Tuesday immediately after morning exercise. The two sales people in charge of the store must know the prices of eggs from one to a dozen, and also must know how to accept and return proper change. For example, if a customer buys a dozen eggs for 36 cents, the salesman must select the change from his money-drawer. Of course, drills on the number tables precede the weekly sales, and between times the children in class play store with one another so that the sales people may be chosen wisely.

In addition to drills on number tables, the work with the chickens

demands a knowledge of the different coins, of the writing of dollars and cents, and of the addition and subtraction of dollars and cents. For developing this knowledge, use is made of artificial coins which the children make of cardboard. This toy money is used also for teaching the idea of the decimal notation of numbers, by letting pennies stand for units and dimes for tens, and for teaching the processes of carrying in addition and of changing from higher to lower denominations in subtraction. The chicken expense items are counted with this toy money until real money is earned from the sale of eggs, when it is discarded for real currency.

In the fall the children make boxes to hold their toy money. This, too, provides experience with the ruler. During the making of their boxes the children have occasion to name, find on their rulers, and use $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{8}$. This and other uses of the ruler, and work with weights of different fractions of a pound, give considerable knowledge of fractions up to $\frac{1}{16}$ and of their relations.

The table of liquid measure is learned in various ways. Some use of it is provided in the work in cooking, some in connection with the chickens, and some in experimental work on making lye and dyeing yarn for weaving rugs. A favorite exercise is to "picture" how much milk each class drinks at luncheon during one school week. Each day during the week they "picture" with water the amount of milk drunk, and when they see the week's amount measured by water in a tub, they are delighted.

Another activity of the second grade which affords much mathematical experience and imagery is the study of foods, discussed in an article of this volume, and still another consists of a study of shepherd life which is carried on in this grade, a part of which involves the dyeing and weaving mentioned above. Of course, the activities here mentioned do not include all of the sources of number experience in the second grade. Among other activities employed have been various number games, such as playing store, playing fireman, and such standard scoring games as bean-bag.

Another type of mathematical experience of the elementary grades, which does not run throughout the school year but is provided by activities of a temporary character that arise in the life of the school or of a grade, is illustrated by the following examples:

Every year each grade provides clothing and supplies for a Thanksgiving dinner to a number of poor families of the city. Some

mathematical work is done by the children in this connection. For example, one year the third grade undertook to supply five families with clothing and Thanksgiving dinners. Lists of the members of the families were given to the children. These lists were written upon the blackboard, so that the children could see the size of each family. From these lists the children made tentative food lists of what they thought was needed for each family. A price list was then secured and the children made the food bills for the families.

BILL FOR FIRST FAMILY		BILL FOR SECOND FAMILY	
2 chickens	\$1.36	1 chicken	\$0.68
1 bu. potatoes .....	.96	½ bu. potatoes.....	.48
2 cans corn .....	.18	2 cans corn .....	.18
1 can tomatoes .....	.06	1 can tomatoes .....	.06
1 lb. coffee .....	.25	1 lb. coffee .....	.25
1 lb. rice .....	.08	1 lb. rice .....	.08
½ lb. tea .....	.23	½ lb. tea .....	.23
5 lbs. sugar .....	.25	5 lbs. sugar .....	.25
5 lbs. flour .....	.18	5 lbs. flour .....	.18
Nuts .....	.18	Nuts .....	.18
Fruit .....	.55	Fruit .....	.40
<hr/>		<hr/>	
Total	\$4.28	Total	\$2.97

The total cost of the food of the five families was then found. The grade contributed \$18.00, and finally from this amount the price of the food was subtracted. The food bills were then taken to the office, where the children actually paid for the food which they sent out to the families at Thanksgiving.

Every year the school sends out with its toys and other packages to poor children at Christmas a large amount of home-made candy, made by the children of the school. Each child to whom the candy is sent is allowed one-half pound. The mathematical work connected with this project is performed for the school by the children of the third grade. The first problem given to the grade is to devise some way in which this candy may be sent out in a clean, attractive, and sanitary way. The following is an account of the work done by the grade one year:

The children of the grade planned and made enough candy boxes to supply all of the children to whom the candy was to be sent. First there was a period of experimentation to determine the size and kind of boxes to make. The children made different kinds of boxes which they thought would solve the problem. These were made with sepa-

rate covers. Since 150 boxes were needed, this scheme really meant the making of 150 boxes and as many covers, really 300 boxes. The children saw the impracticability of such a scheme, and went back to their experiment with new vigor. Sample boxes of many sizes and shapes were brought to school, the children finally accepting one in which the cover was a part of the box itself.



CHRISTMAS CANDY BOXES

With the pattern decided upon, the problem of size next arose. With inch cubes, a block the size of a half-pound box was built up on the table. Much drill in square measure was afforded by this. For example, how many square inches on the ends of a box, on the bottom, on the top, etc. Next came the construction of a working pattern from these cubes. As the children gave the dimensions of base, sides, ends, top, the pattern was drawn the exact size on the board. The bottom, sides, ends, and top were drawn.

Experiment showed that there must be something more to the box if it were to hold together properly. Consequently, paste-flaps were added. A flap that would fit into the box when closed was added to the top. With this pattern before them, the children were asked to determine the smallest square from which the box could be cut, and found it to be an eleven-inch square. The cardboard to be used was bought in sheets, which were $22\frac{1}{2}$ inches by 26 inches. After measur-

ing, the children found that four boxes could be made from one sheet of cardboard, with some waste. All this work again afforded excellent drill in addition, subtraction, and square measure. Next came the estimating of the number of sheets of cardboard required to make 150 boxes.

Before the children were allowed to work with the red and green cardboard, each child had to demonstrate that he was capable of making a perfect box. These trial boxes were made of brown wrapping-paper. When the children had thus proved their ability, work was begun with the red and green cardboard.

After the boxes were planned and cut out, and before they were folded and pasted, the problem of the decoration of them was taken up. Pieces of cardboard, three inches by five inches (this being the size of the top of the box) were given the children for experimentation. Borders, three-eighths, one-half, and five-eighths of an inch wide, were drawn. As another problem in design, the children were told to mark off on white drawing-paper two one-inch squares. The first square was divided into four one-half inch squares; the second was marked off into one-half inch squares, and, in addition, diagonals were drawn. These four small squares and eight smaller triangles that resulted from the cutting were then arranged in many original designs by the children, examples of which may be seen in the picture.

In addition to the great amount of arithmetic incidental to the planning and construction of the candy boxes, such problems as the following also were given to the grade in connection with the Christmas work:

FAMILIES FOR WHOM CHRISTMAS CANDY IS TO BE MADE BY THE FRANCIS W. PARKER SCHOOL:

FAMILY	NUMBER IN FAMILY
Mrs. Lane	11
Mrs. Ruffin	5
Mrs. Stesmak	5
Mrs. Kotells	5
Mrs. Baylie	8
Mrs. Spurling	5
Mrs. Langlus	4
Mrs. Smith	4
Mrs. Morse	10
Mrs. Mascarello	7
Mrs. Ferguson	9
Mrs. Warnick	9

(List of families, continued.)

Mrs. Lucas	5
Mrs. Minkond	9
Mrs. McMahon	9
Mrs. Franklin	4
Mrs. Freundt	4
Mrs. Cutrara	8
Mrs. Calucci	4
Mrs. Thorson	4
Mrs. Delver	4

How many in all are to be provided candy?

Allowing one-half pound of candy for each, how many pounds must we make?

To the Third Grade:

Some of the children who are to make candy for Santa Claus will make it at home and bring it to school. The rest of the candy will be made at school. You found that the whole amount to be made was seventy-one pounds. The children who will make candy at home have agreed to make the following amounts: 3 lbs., 4 lbs., 3 lbs., 4 lbs., 2 lbs., 5 lbs., 2 lbs., 3 lbs., 4 lbs., 4 lbs. and 4 lbs. We want to know how many pounds the other children must make at school.

How many pounds will the children make at home?

Then how many pounds must the other children make at school?

(Signed)

Chairman Candy Committee.

In addition to such problems as those given above, other kinds of problems arise in connection with the Christmas candy-making from year to year. Each year the second-grade children weigh out the sugar for the school to use in making the candy.



SEVENTH-GRADE BANKING

Each year the march of world events adds so immeasurably to the heritage of man that the most optimistic among teachers must approach his work with a daily increasing sense of responsibility—a responsibility which takes into account the fact that, in spite of the increasing complexity and richness of the life surrounding us, and our natural curiosity to understand it all, the time devoted to the building of the character and the training for social efficiency is not at all, or at best only slightly, increased. It leads us to ask, what is the value of every hour of childhood or adolescence in terms of what we call education? How can education proceed scientifically and economically? What adjustment can pedagogy make between the dictates of tradition, of preconceived notions of the function of the school, of what the mature mind considers essential knowledge and power, and what the child longs to know and will consider worthy of his attention and effort? This momentous question is now attaining such definition of detail for us all that we may soon hope for the bridging over of the great gap between the psychologist's laboratory and the schoolroom. Observation and teaching experience, however, point to the lead of Dr. John Dewey, who says in *Interest as Related to Will*:

“But just as our psychology shows us that ideas arise as the definition of activity, and serve to direct that activity in new expressions, so we need a pedagogy which shall lay more emphasis upon securing in the school the conditions of direct experience and the gradual evolution of ideals in and through the constructive activities; for it is the extent in which any idea is a projection of natural tendencies that measures its weight, its motive power, its interest.”

Even in the most modern schools, where an effort is made to bring every possible contribution to pedagogy to bear in the educative process, there is still heard the cry that the teaching of the mechanics of the three R's requires far too great a proportion of time. Why is it? If it is true, it must be that these obstacles to richer childhood are still being taught as ends instead of means. What is meant by motivation of the subject-matter to be taught must still be misunderstood. The real inner motive power in the child must often be lack-

ing when we think it is present. A seemingly genuine participation in the activities about him may still be a very superficial one after all. Are we giving him every opportunity to occupy himself with activities which will prove to him intellectually and emotionally that the three R's *are* only means to a great wealth of ends; that in exchange for the precious time saved in their mastery he will have leisure to hold communion with the workers who search the everlasting truth? Are we constantly helping him to measure definitely his own efforts and growth in terms of efficiency, not marks? Does he look upon the hours given over to drill as an opportunity to perfect his efficiency for real activity? Does he look upon the recitation period not as a time to repeat for the teacher what he has studied in a book, but an opportunity to organize, with the help of all the class and the teacher, ideas or groups of ideas into working principles or experience for the regulation of his actions?

With these and other questions in mind, a plan was organized for use in the seventh grade by which business arithmetic and its applications could be more satisfactorily taught. The children seek from among their number two boys and two girls, who in a series of tests on the four operations in whole numbers, fractions, and decimals, and their application in common problems of denominate numbers, mensuration, etc., prove themselves most accurate and quick at computation. These fortunate ones act as paying and receiving tellers, the girls working in the "Woman's Department," of a play bank. The other children represent retail firms of all kinds, excluding department stores for obvious reasons. They spend several weeks in gathering information from trades people about their wares and prices and expenditures: compile catalogs, make copies for distribution, and plan advertisements, rates of discount on large or cash sales, etc.

The bank is a case resembling a bookcase, containing the account books, and boxes for coin and currency, blanks of all kinds, deposit-slips, individual bank-books, check-books, drafts, bills, receipt-books, etc., and a cash box for each teller. Below is the "vault," where each firm stores its cash box for the night. While the firms are preparing to open up business, the tellers are taking stock of all the currency and coin and preparing generally for rush hours at the bank. They readily foresee impending difficulties and plan to overcome them; they soon learn that the rapid and accurate counting of money, which seems a negligible task, is really a difficult one. One

class invented what they called a "money-counter," to aid in handling larger sums.



SEVENTH-GRADE BANKING

As soon as the class has tested itself on the making and balancing of a cash-account, the writing of orders, bills, receipts, etc., operations begin. Each firm starts with a capital of some two or three hundred dollars, which is later on increased as necessity demands. The currency is play money bought at a school-supply house, and the coin is printed by the children on different colors of heavy bristol-board. All the business forms used, such as check-books, bank-books, drafts, promissory notes, bill-heads, etc., are also printed by the children. (Some of these are shown in Volume I of the Year Book, p. 100.) To simplify operations in the beginning, the factors of business competition, supply and demand, running expenses (such as rent, insurance, license, or tax) are all eliminated—merely discussed. No actual materials are bought and sold, this phase of the work being wholly a matter of imagination. To insure a successful start, each firm makes out only three or four orders per day, the number being increased only as the children become more expeditious and accurate. Each child owns a list of the firms, and orders are made out in rotation to simplify the checking of errors. The cata-

logs which are used as guides in making out orders are often unique, revealing to the teacher undiscovered traits in the children.

To control the quality of the formal English used in this work an extra charge of ten cents is made for every mistake discovered by the recipient of any document. For any mistake found on advertisements displayed before the public, any beholder may collect ten cents.

At the opening of the period the orders are delivered, whereupon bills are made out and collected. At a given time, the market closes and cash accounts are balanced. All firms whose cash accounts agree with the cash on hand may deposit boxes in the vault. Those who cannot balance accounts seek for the errors and are not open for business until they are found. The first few days of work bring a flood of mutual advice which is often put into written form for reference. Following are some points noted by the novices in the backs of their cash books.

1. If your cash-box does not agree with the "cash on hand" in the book, look for errors in the following ways:

- a. Count your money on a money-counter, add up the debit and credit columns, first from the top and then from the bottom, then subtract several times and prove the subtraction.

- b. If you cannot find your mistake and are willing to give up, ask some one to count your money for you.

- c. If you still cannot find mistakes, look up the orders and bills for the day. You may have forgotten to record a sale or an expenditure.

- d. Look at the "cash on hand" of the day before—that is, the number you carried over for the balance. You may have carried over the proof instead of the balance.

2. Deposit as much money as possible in the bank. Then you will have less to count every day.

3. Enter all transactions immediately in the cash book. Do not depend upon your memory at the end of the day.

4. Never pay or accept money without counting it.

5. Have a place for everything. You are less apt to make a mistake and do not have to take time to hunt when customers are in a hurry.

6. Do not talk to people who are counting or adding.

7. Warn those who leave money lying about or who drop it. It will avoid mistakes.

8. Never talk so your neighbor can hear; he may be counting.

9. Hurry makes mistakes. Do not hurry others, and do not wait for them. Do other things while you are waiting. It will save your time.

For a few days, just at the beginning, all business is suspended until all errors for the day are checked. The children's comments are an indication of the effect on their attitude toward accuracy and other matters. "It wouldn't be so bad if my mistake didn't make other people's accounts go wrong." "I'm going to watch myself. Sometimes I can't remember what I did." "A man who doesn't make mistakes has more time to do business." "You have to do numbers in your head if you want to be quick." "It seems that the faster you think, the fewer mistakes you make." "Some people talk too much to buy just a little. Do storekeepers lose money that way? Sometimes other customers are waiting. What can the storekeeper do? Because, if he gets cross, the customers may not come back."

A careful record is kept by the children of the quality and quantity of the work accomplished each day. As soon as there is evidence of more power in either or both directions, new phases are introduced. As soon as checks are handled with ease, savings are opened. Surrounded by the simpler elements of trade conditions, the children look upon the great variety of business forms, such as deposit-slips, receipts, retail and wholesale billheads, checks, drafts, sight-drafts, promissory notes, bank-notes, etc., not as burdensome and confusing bugbears, but rather as friendly aids in simplifying and promoting business operations. In time some retail firms go into wholesale business when it becomes necessary for all the merchants to understand the more intricate business relations which involve discount, investments, etc., and which lead to discussions on such topics as the clearing-house, banking methods, and their development, reserve banks, international trade and loans, tariff, and so on. This constructive play, carried on so simply and in such modified form, but nevertheless with great earnestness and absorption, seems to afford sufficient contact to bring from even the slower members of the group questions which do not stop short of political economy itself. So far no group has failed to ask, "What does it mean to make money? With us money only changes hands. It never grows more when you add up what everybody has. It isn't that way with people and countries, is it?" "What's the difference between money and wealth?" The answers come, some promptly, and some after many days of thinking, with just as little suggestion and interference from the teacher as possible at first. "Money comes from work." "No, I think some of it comes from trading. The more and the faster you trade, the more you

make." "But who makes the things you trade?" "The crops that grow every year must be the wealth, then?" "And what we get from the earth other ways, like from mines." "Yes, but we use up the food that is raised every year." "Yes, but you have to work to earn the money to buy the food." "The farmers and miners must be the real workers then." "When prices go up, does it mean there are too many people in cities and not enough on farms?" The foregoing comments give only a glimpse of the whole fabric of questions of this and other types. It becomes the duty of the teacher and the class to choose from the mass such subjects for discussion as will give the fullest satisfaction for the time allotted. The choice may fall, for example, between a question of coinage and one of ethics. One group of children asks: "How do they ever know how much of each denomination of money to coin?" "Why don't we have one-half cent or three-cent pieces, too?" "Does a country have to coin or make just as much money as its wealth represents?" Another child asks: "If a man buys a lot cheap because he knows another man wants it very much, and then sells it to the other man for much more, is that fair? He didn't have to work to make that money. Should trading bring as much money as work?" It has happened when a lack of time demands that a choice be made, that a child says, "We could read up about coining money and such things in a government book outside of class, couldn't we? But we couldn't read about what's fair in a book, I think. Please tell us about that." This, though gratifying to the teacher, does not mean that he would not have found it much easier to discuss the questions of coinage than the matter of business ethics and the significance of the term "success in business."

It has occurred several times that our visitors from foreign countries have looked upon this work in business arithmetic as a very questionable undertaking, voicing fears that it might over-emphasize the commercial instinct already commonly associated with Americans, at the expense of higher and more spiritualizing culture. On first thought, this seems a natural inference to make. Closer observation, however, bears out the conclusion that by this constructive association with the ethics of business it is possible for deeper and more lasting impressions to be made before the finer and more instinctive moral reactions of some children are dulled or before the judgments of others are formed at all. This early acquaintance with business operations may help to place this subject in its correct perspective.

EXPERIENCE-BUILDING IN THE TEACHING OF GEOMETRY

In this school we have ventured to deviate from the traditional teaching of geometry in several ways. In the change from the time-honored course, some material has been eliminated. The sequence of subject matter has been greatly altered. The traditional Greek division of geometry into five books has been abandoned. In addition



PUPILS LAYING OUT A RIGHT ANGLE BY MEANS OF THE OPTICAL SQUARE

to the compasses and straight-edge to which the constructions of geometry have been limited since the time of Plato, use is made of the other instruments that are employed in geometrical constructions in modern times. The subject has been simplified by assuming, from construction or observation, some of the difficult theorems at the beginning of the subject that it has been the custom to have pupils prove. Instead of the common method in which pupils merely memorize the proofs of theorems as they are given in the book, the suggestive method is employed, in which mere memorizing is made impossible and pupils are taught to think things out for themselves. The barriers between geometry and other subjects, such as algebra

and trigonometry, are broken down, and some degree of correlation of all these subjects secured. And last, but not least in importance, the content of the subject matter is vitally affected in the effort to relate the subject to the real and practical experiences of the pupils. It is with this last phase of the teaching of geometry that this report is to deal.

The attempt to relate geometry in the secondary schools to the concrete or practical experiences of the pupils, which has in the last few years attained the magnitude of a national movement, has resulted from the newer view of the nature and aim of true education and from the recognition of certain fundamental laws of psychology in harmony with this view. In true education the mere acquisition of knowledge is not the end. Rather, knowledge should be acquired as the result of purposeful action, and should in turn become a means to action. From this view of the place of knowledge in education two corollaries follow: First, true knowledge on the part of an individual must grow out of his own experience. Psychologically, knowledge to be real must have as basis a body of clearly defined mental imagery; this body of imagery in turn must result from some form of experience. It is out of this body of imagery that creative imagination is built, which is the basis of all purposeful conduct, all initiative, all originality, all constructive action. Second, the complete educative process includes not only the acquisition of knowledge but also its functioning in action. Knowledge is not complete until it functions. Psychologically, knowledge to endure must be provided opportunity to function through use. Knowledge not used, and used promptly, tends to atrophy. The violation of these principles in teaching constitutes not only the lost opportunity, or even stupidity, of formal education, but its gross wrong to childhood. Formal education has too persistently lost sight of the real, natural activities and experiences which constitute the very sum of child life and out of which alone true knowledge can grow, and such knowledge as does result is too often a valueless and fleeting thing because it is afforded no opportunity to function in action.

To the traditional teaching of geometry this criticism applies. The three essential psychological steps in the educative process are laying a foundation of experience upon which to build, organizing a body of knowledge out of this experience, and finally applying the resulting knowledge to some kind of practical use in the concrete world.

Of these three steps, in the traditional teaching of geometry the first and last have been omitted and only a step corresponding to the middle one supplied. In the first place, the geometrical concepts and principles with which the pupil is to struggle are not thoroughly grounded in his personal experience. They are largely intellectual abstractions. In beginning geometry the pupil is immediately introduced to two difficulties at once—to reasoning about abstract things beyond his mental horizon, and to struggling in the attempt to master



PUPILS MEASURING HEIGHT OF BUILDING BY MEANS OF GEOMETRIC SQUARE

the intricacies of an exacting logical demonstration. And again, once the pupil has gained a mastery of these difficulties, if ever, he is not allowed opportunity to put the knowledge acquired to use in the solution of real practical problems or in purposeful action of any kind.

In teaching geometry in this school we have attempted to supply all three of the steps in the educative process. In the first place, formal demonstrative geometry is preceded by a considerable amount of inductive work, in which, through constructions, measurements, and observations, many of the fundamental concepts and principles of geometry are developed in an objective way. For example, the pupil gets a clear mental image of complementary angles, and discovers the principle that complements of the same or equal angles are equal,

through constructions and practical uses of such angles, before he is introduced to the formal demonstration of theorems in which the use of the principle of complementary angles is involved. In addition to building thus a foundation of concrete experience and imagery upon which later to base the work of formal demonstrations, the pupil becomes familiar with the various drawing instruments and their uses in the construction of some of the principal geometrical figures which later are involved in the theorems.

Again, many of the theorems of formal geometry are approached concretely, so that a body of experience and imagery is built about them before their logical demonstration is undertaken. For example, the theorem that the sum of the angles of a triangle equals one straight angle is shown objectively in a number of ways. One way is to cut out a paper triangle, then tear off the three corners and place them adjacent, so that they form a straight angle. This is actual physical addition of the angles. Another method is to turn a ruler through the three angles of a triangle in succession, and note that the ruler has just been reversed in direction, or turned through a straight angle. A third is to measure the angles of a triangle with a protractor, and find their sum arithmetically. Similarly, the proofs of theorems on the congruence of triangles are preceded by geometrical constructions and physical superpositions, which supply adequate mental imagery for the logical demonstrations that follow. In addition to such methods as these for grounding the knowledge of geometry on the personal experiences of the individual pupils, it will readily be seen that applications of many of the theorems of geometry to practical problems, as will be described in the subsequent part of this report, surround those theorems by a body of imagery that gives clearness to their meanings.

Applying the general principle that knowledge of geometry, to be real and permanent, must be afforded opportunities to function through immediate use, we have attempted, with considerable success, to make applications of the constructions and theorems of geometry to practical problems, usually immediately following the demonstration of them. While direct practical applications of some theorems have not been found, suitable, and in some cases excellent, practical problems have been found for applying many of the theorems of geometry.

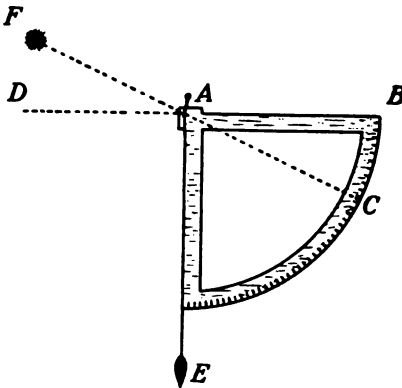
These applied problems have been selected from many fields of

human activity, such as surveying, bridge-building, carpentry, designing, architecture, physics, astronomy, the construction and use of various measuring instruments, etc. The following miscellaneous typical problems will serve to show their character and also their relations to the standard theorems of geometry.

PROBLEM.—The angle FAD of elevation of the sun may be obtained as follows: A quadrant is held in a vertical position so that a plumb line AE , fastened to a pin at the vertex A , falls upon 90° . The pin casts a shadow on the scale at C . Show that the angle of elevation is obtained by reading the number of degrees on the quadrant from B to C .

The proof is based upon the theorem:

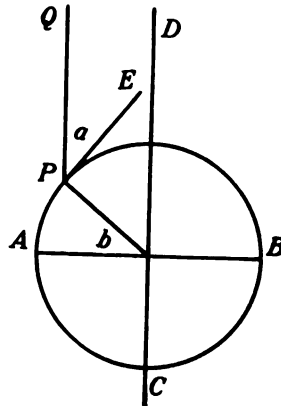
If two straight lines intersect, the vertical angles formed are equal.



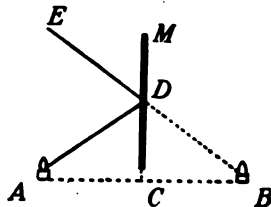
PROBLEM.—The latitude of a point on the earth may be found by observing the altitude of the North Star. Prove that the latitude of the observer equals the altitude of the North Star; i. e., $a = b$. (AB is the equator, and CD the axis of the earth. If the observer is at P , the direction PQ to the North Star is parallel to the axis, because of the great distance of the star from the earth.)

The proof is based upon the theorem:

If two angles have their sides perpendicular, each to each, and both are acute, they are equal.

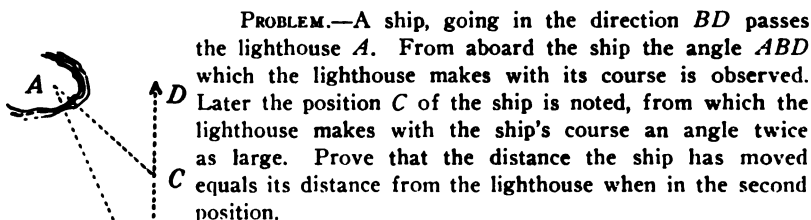


PROBLEM.—Every one is familiar with the fact that if an object is placed before a plane mirror, its image appears to be as far behind the mirror as the object is in front of it. Prove that this must always be so. (M is an edge view of the mirror. The image of the object A is B . Light from A strikes the mirror at D , and is reflected to the eye at E . The mind projects the ray ED to B . The angle at which light is reflected from a mirror equals the angle at which it strikes. Prove $AC = BC$).



The proof is based upon the theorem:

If two triangles have two angles and a side of one equal respectively to two angles and the corresponding side of the other, the triangles are congruent.

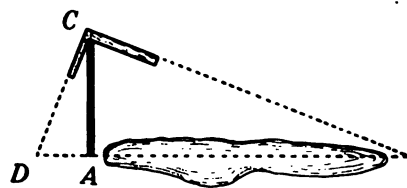


PROBLEM.—A ship, going in the direction BD passes the lighthouse A . From aboard the ship the angle ABD which the lighthouse makes with its course is observed. Later the position C of the ship is noted, from which the lighthouse makes with the ship's course an angle twice as large. Prove that the distance the ship has moved equals its distance from the lighthouse when in the second position.

The proof is based upon the theorems:

The exterior angle of a triangle equals the sum of the two opposite interior angles.

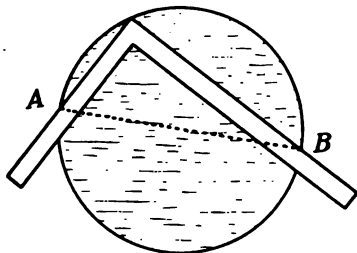
If two angles of a triangle are equal, the sides opposite the equal angles are equal, or the triangle is isosceles.



PROBLEM.—A method used several centuries ago for determining the distance from a point A to an inaccessible point B was to erect a vertical staff AC , place upon this an instrument resembling a carpenter's square, direct one blade toward B , and note the point D on the ground toward which the other blade pointed. Show how to find AB by measuring AC and AD . If $AC = 6$ ft. and $AD = 3$ in., find AB .

The proof is based upon the theorem:

If two triangles are similar, the homologous sides are in proportion.

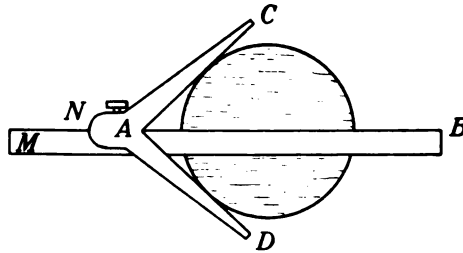


PROBLEM.—Prove that the center of any circular object may be located by means of a carpenter's square, as follows: Lay the square on the object, with the heel at the rim, and mark the points A and B where the blades cross the rim. Now, by placing a blade of the square on A and B , find the middle point of AB . That is the center.

The proof is based upon the theorem:

An inscribed angle of a circle has the same measure as one-half of the intercepted arc.

PROBLEM.—The instrument called a center square is used for locating the centers of circular objects. It consists of a steel bar or blade M , upon which slides an attachment N . The edge AB of the blade M bisects the angle between the two prongs AC and AD of the attachment N . When the center of any circular object is to be found, the instrument is placed so that the prongs AC and AD are tangent to it. Prove that when this is done the edge AB passes over the center of the object.

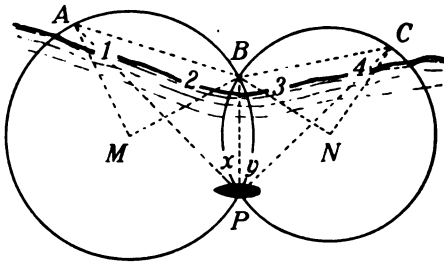


The proof is based upon the theorems:

The locus of points within an angle and equidistant from its sides is the bisector of the angle.

The radius drawn to the point of contact of a tangent is perpendicular to the tangent.

PROBLEM.—An important problem in marine surveying is to determine the position P of a boat from which soundings are being made along a coast. The boat moves from place to place, and it is necessary to locate these positions on the chart. Three stations, A , B , and C , are located on the shore. Angles x and y are observed from the boat. A , B , and C , are located on the chart. P is located on the chart by the intersection of two circles passing through A , B , and C . Show how to locate their centers. Suppose $x = 40^\circ$, $y = 70^\circ$.



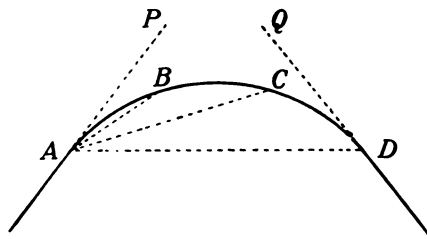
P is located on the chart by the intersection of two circles passing through A , B , and C . Show how to locate their centers. Suppose $x = 40^\circ$, $y = 70^\circ$.

The construction and proof depend upon the theorems:

An inscribed angle has the same measure as one-half of the intercepted arc.

The angles opposite the equal sides of an isosceles triangle are equal.

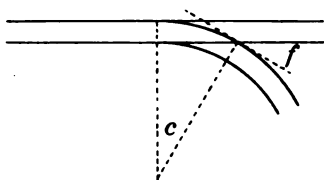
PROBLEM.—In railroad surveying, curves are laid out by turning off equal angles and setting stakes every 100 ft. If the curve begins at A , angle PAB is turned off from the tangent AP , and AB measured 100 ft., then angle BAC is turned off and BC measured 100 ft., and so on until the curve ends in the tangent DQ at D . Since the curve is to be the arc of a circle,



show that angles PAB , BAC , etc., must be made equal, and each equal to one-half of the central angle subtended by a 100-ft. chord.

The proof depends upon the theorem:

An inscribed angle of a circle has the same measure as one-half of the intercepted arc.



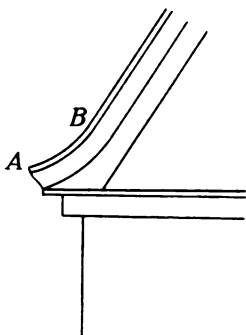
PROBLEM.—In laying out switches on a railroad track, a “frog” is used at the intersection of the rails to allow the flanges of the wheels moving on one rail to cross the other. The angle of the “frog” that must be selected for any place depends upon the central angles of the two tracks. If one track

is straight and the other curved, prove that angle f of the “frog” equals the central angle c of the curved track.

The proof depends upon the theorems:

The angle between a tangent and a chord has the same measure as one-half of the intercepted arc.

A radius perpendicular to a chord bisects the subtended arc.

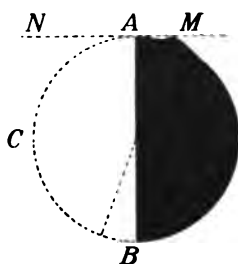


PROBLEM.—In architecture it is required sometimes to draw an easement cornice tangent to the straight or rake cornice at B , and ending at a given point A . Explain the construction, and make such a drawing. (NOTE.—The same construction is used in laying out the easements of stair rails.)

The construction and proof depend upon the theorems:

The perpendicular to a tangent at the point of contact passes through the center of the circle.

The perpendicular bisector of a chord passes through the center of the circle.



PROBLEM.—Galileo measured the heights of the mountains on the moon as follows: ACB was the illuminated half of the moon just as the peak of the mountain M caught the beam NM of the rising or setting sun. He measured the distance AM . Show how he was able, by using the known diameter of the moon, to compute the height of the mountain.

The computation and proof depend upon the theorem:

If from a point without a circle a tangent and secant are drawn, the tangent is a mean proportional between the whole secant and its external segment.

In addition to such miscellaneous applied problems of geometry as those described above, there is a special group of applied problems

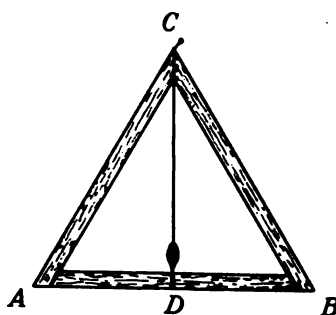
used by our classes in geometry which should be described on account of their exceptional value and interest to boys and girls. The special value and interest are due to the fact that these problems involve activity, involve doing as well as reasoning on the part of the pupils. They relate to the construction and uses of various instruments for measuring, surveying, etc.

For a number of years, the pupils of the geometry classes have made certain simple instruments, and then used them, mostly out of doors, in doing certain practical work. All of the instruments have been made in the manual training room at school, most of them outside of regular school hours.

A number of the instruments made by the pupils are similar to the simple instruments that were used in practical surveying, leveling, etc., centuries ago, before the modern delicate and more complicated ones were invented. While many of them have been superseded in practical life today, they possess special interest in showing how the world's work has been done in the past, and a special value in that each, in its construction and use, involves a simple, direct application of one or more of the standard theorems of geometry.

A description of some of these instruments and of the kinds of practical problems in which they are used, and the theorems of geometry underlying their construction and uses, follow:

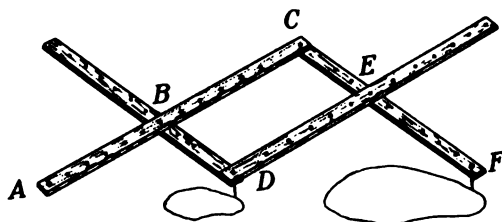
THE PLUMB LEVEL.—This instrument, which was used for leveling before the modern spirit or bubble level was invented, takes its name from the plumb line, which is the significant part of the instrument, just as it was in most of the measuring instruments used in early times. It consists of three boards, AB , AC , and BC , which are fastened together so as to form a triangle. AC and BC are of the same length. A mark D is placed at the middle point of AB . A plumb line is suspended from C .



When being used the instrument is held with AB upon the surface to be leveled. If the plumb hangs directly over the mark D , the surface is level.

Since a level object must be horizontal, that is at right angles to vertical, and since the plumb line marks a vertical line, the proof that the surface is level consists of proving that AB is perpendicular to CD . This is an application of the theorem:

In an isosceles triangle the median to the base is perpendicular to the base.



THE PANTAGRAPH.—

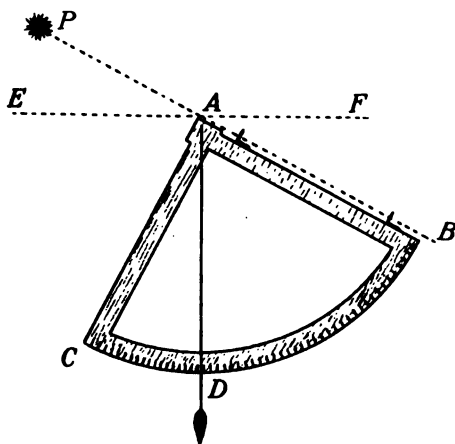
The pantagraph is an instrument for drawing a plane figure similar to a given plane figure, and is useful for enlarging or reducing maps or designs. It consists of four bars, parallel in pairs, and joined by pivots at B , C , D , and E . A turns on a fixed pivot, and pencils are carried at D and F . BD and DE are adjusted so as to form a parallelogram $BCED$ and so as to make any required ratio $\frac{AB}{AC}$ equal to $\frac{CE}{CF}$.

When used for enlarging a drawing, the pantagraph is placed over the drawing, and when it is turned about the fixed pivot A , the pencil D is moved around the boundary of the drawing. At the same time the pencil F traces an enlarged drawing, similar to the given one.

The use of the instrument requires the proof (1) that A , D , and F are in a straight line, and (2) that the ratio $\frac{AD}{AF}$ remains constant and equal to the given ratio $\frac{AB}{AC}$, so that if D traces a given figure, F will trace a similar figure, the ratio of similitude being the fixed ratio $\frac{AB}{AC}$. The proof depends upon the theorems:

The opposite sides of a parallelogram are equal.

If two triangles have two sides of one proportional to two sides of the other, and the included angles equal, the triangles are similar.



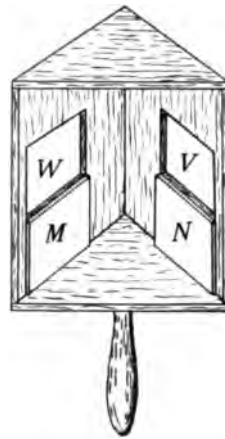
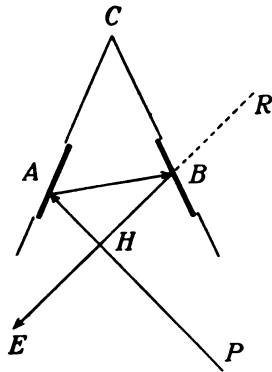
THE QUADRANT.—The quadrant consists of the fourth of a circle, with the arc BC graduated into 90° . The radius AB bears two sights. A plumb line, suspended from a pin at the center A , crosses the arc at D .

The quadrant is used for determining angles of elevation or depression. Tycho Brahe (1546-1601), a Danish astronomer, used such an instrument for finding the altitudes of stars, i. e., their angular distances above the horizon. Our pupils

use it for finding the altitude of the North Star, in order to determine the latitude of Chicago. They use it also in problems to find the heights of objects in the neighborhood, by measuring the base line and using a table of tangents, or by drawing to scale. The number of out-of-door problems that may be solved by measuring angles of elevation or depression with the quadrant is almost unlimited.

When the angle EAP of elevation of an object, as a star P , is being measured, the quadrant is held in a vertical plane, and the radius AB , by means of the sights, pointed toward P . By reading the arc CD the number of degrees in angle EAP is obtained. Since the plumb line AD is at right angles to the horizontal line EF , and angle BAC is a right angle, the proof depends upon the theorem:

Complements of the same or of equal angles are equal.



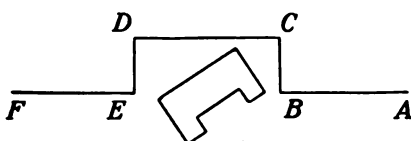
THE OPTICAL SQUARE.—The optical square is an instrument used in field work, such as forestry, for laying out right angles. It consists of a box with triangular top and bottom, and but two side walls, which are set at an angle of exactly 45° . In these walls are cut openings or windows, W and V . Below the windows, mirrors, M and N , are fastened against the walls.

When a line is being laid out at right angles to a given line at a given point, the instrument is held in a vertical position at this point, and the observer, looking directly into the box through the open side, turns the box until he can see, through one of the windows, say V , an object marking another point in the given line. Then an assistant with a target rod takes a position such that the image of the target appears in the mirror N just below or vertically coincident with the object seen through window V . The target rod and the position of the observer then mark out the required perpendicular line.

The diagram shows the path of the line of sight through the optical square. Light coming from the object at P strikes the mirror at A , is reflected to the mirror at B , then reflected to the eye of the observer at E .

The mind projects the image of the object to R . Then ER is at right angles to AP . Assuming as hypothesis that the angles of reflection and incidence of the light are equal at A and also at B , and that angle C is 45° , the proof depends upon the theorem:

The sum of the angles of a triangle is a straight angle.

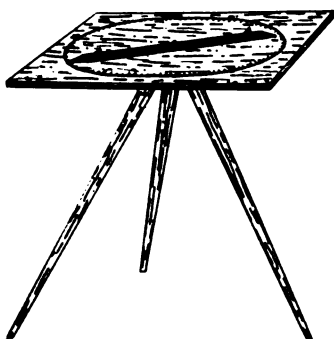


One of the practical uses that we have made of the optical square in out-of-door work has been in the problem to continue a given line AB beyond an obstacle, one of the practical problems frequently encountered in civil engineering. By means of the optical square, the offset BC is run at right angles to AB , then DC is run beyond the obstacle at right angles to BC . Then the offset DE is run equal to BC and at right angles to DC , then EF at right angles to DE . The proof that EF is a prolongation of AB depends upon the theorems:

Two lines perpendicular to the same line are parallel.

If two opposite sides of a quadrilateral are equal and parallel, the figure is a parallelogram.

Another out-of-door use that we have made of the optical square is in playing pirates. One geometry class, playing that it is a band of pirates, by using the optical square, a tape line, and target rods, surveys a line with many turns and runs, and at the end of it buries in the ground a silver chest of treasure (possibly a tin can with something in it). A description of this survey prepared by the class is given, possibly the following day, to another class, which re-surveys the line to find the treasure. Boys and girls enjoy this game. The play instinct of pupils of this age is by no means dormant.



THE TRANSIT.—We gave this name to the instrument because of the similarity of its uses to those of the modern engineer's transit. The transit consists of a board mounted horizontally upon a tripod (a converted plane table); the board bearing a pointer revolving over a circle marked off into 360° . The instrument can be used in all kinds of out-of-door problems that involve the measurement or construction of an angle in a horizontal plane.

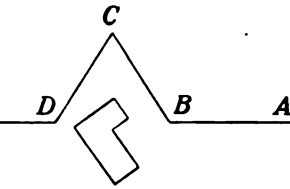
We have used it in playing the game of pirates, where the line surveyed turned at angles of different sizes. We have used it also in the problem of civil engineering to continue a line AB beyond an obstacle by the 60-degree method. The transit is set up at B ,

and the line BC run beyond the obstacle, at an angle of 60° with the prolongation of AB through B . Then the transit is set at C , and line CD run equal BC and making angle BCD 60° . Then the transit is set at D , and DE run at an angle of 60° with the prolongation of CD through D . The proof that DE is a prolongation of AB depends upon the theorems:

The sum of the angles of any triangle equals a straight angle.

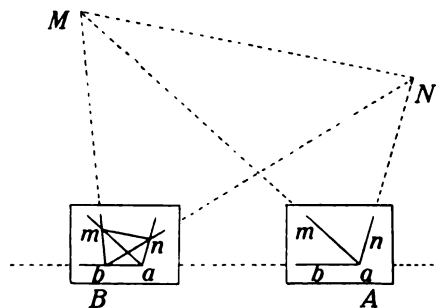
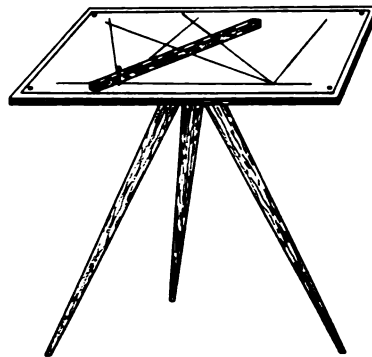
The angles opposite the equal sides of an isosceles triangle are equal.

Among other uses that we have made of the transit in out-of-door problems, is to find the width of the lagoon in Lincoln Park, near the school. To determine AB , the operator sets the transit at A . A right angle BAC is turned off with the transit, and a stake set at C . The transit is then removed to C , and the angle ACB measured. The length of AC is found with a tape line. Then AB is computed by use of a table of sines. It might be found also by drawing the triangle ABC to scale and measuring AB with a ruler.



THE PLANE TABLE.—This instrument consists of a drawing board mounted upon a tripod. A straight-edge is placed upon the board for sighting and drawing lines. It is employed for making maps of small areas, and for determining the distances and directions between inaccessible objects.

One field problem in which we have used the plane table is to find the distance between two points without approaching either of them, such as the distance from the conservatory to the animal house in Lincoln Park. To find the distance from M to N , the operator sets the plane table up at any convenient point A . A sheet of paper is fastened on the board, and a pin is tuck through the paper into the board at a point a , directly over A . The ruler is placed against the pin, and a base line ab drawn on the paper toward a second point B . Lines an and am are



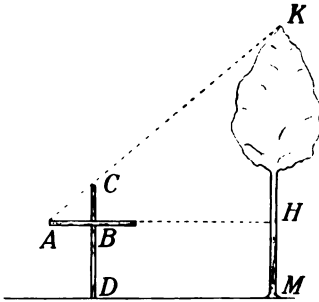
then drawn toward N and M , respectively. The plane table is then removed and set up over point B , so that the line ab on the paper is directly above B and points directly back to the old station A . The pin is then removed to a point b , directly over B , in line ab . Lines bn and bm are then drawn, again toward N and M , respectively. The distance from A to B is measured with a tape line. Lines an and bm meet at n , and am and bm meet at m . Then mn is drawn and measured. Also ab is measured. From these measurements the distance MN is computed by

proportion. The proportion is $\frac{MN}{AB} = \frac{mn}{ab}$. The proof of this proportion depends upon the theorems:

The homologous sides of similar triangles are in proportion.

If two triangles have two pairs of sides in proportion and the included angles equal, the triangles are similar.

We have used the plane table also for making maps of small surfaces, such as the ponds in Lincoln Park. The procedure is somewhat similar to that described above. A description of the method may be found in the text book (Stone-Millis).

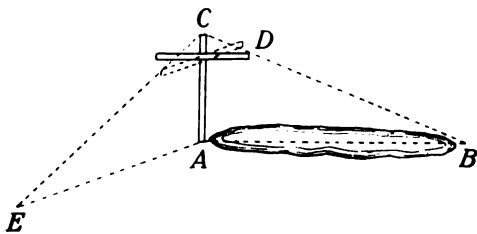


THE CROSS-STAFF.—The cross-staff was used centuries ago in practical surveying for finding heights and distances. It consists of a vertical staff which supports a horizontal cross-piece that may be lowered or raised at will. We have used it to measure heights and distances in various problems out of doors.

When the height of an object MK is being found, the cross-bar AB is raised or lowered until, by sighting along A and C , the points A , C , and K , are brought into a straight line. Then the lengths of AB and BC are noted and the distance AH measured. HK is computed by use of the theorem:

If two triangles are similar, the homologous sides are in proportion.

The height BD , which equals HM , is added to the result to obtain MK .



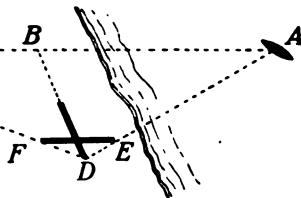
When the distance from a point A to an inaccessible point B is being determined by means of the cross-staff, the cross-bar is raised or lowered until points C , D , and B fall in one line. Then, holding the cross-bar in position, the instrument is re-

volved about AC as axis, and the point E noted at which the line of sight CD strikes the ground. AE is measured. AB equals AE . The proof is based upon the theorem:

If two right triangles have a leg and acute angle of one equal, respectively, to a leg and acute angle of the other, the triangles are congruent.

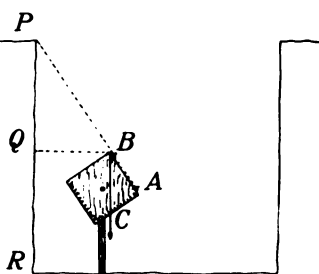
Such a problem as to find the distance AB across a stream, or of a ship from shore, is solved by use of the cross-staff as follows:

The instrument is placed with both the staff and cross-bar in horizontal positions, the staff being pointed in a line parallel to the shore line. The cross-bar is adjusted until D and E fall in line with A . Then an assistant is located at C , directly inshore from A and in line with D and F . BC is measured. AB equals BC . The proof depends upon the theorem above and the following:



Two right triangles having the two legs of one equal to the two legs of the other are congruent.

THE GEOMETRICAL SQUARE.—The geometrical square is one of the instruments most extensively used a few centuries ago for measuring heights, depths, and distances. It consists essentially of a square frame along two adjacent edges of which is marked a scale, and from the opposite corner of which a plumb line is suspended. A pair of sights on another edge aid in sighting the instrument toward a given point.

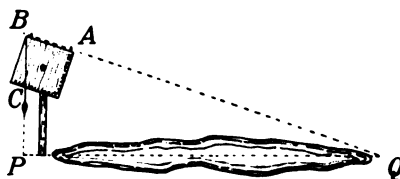


We have used the geometrical square for determining heights and distances of various objects in the neighborhood of the school. One group used it also for determining the depth of a quarry in the suburbs of the city, which an elementary grade wished to know.

When the height PR of an object is to be found, the square is held in a vertical plane, and, by means of the sights A and B , the edge AB is pointed toward P . The plumb line crosses the graduated scale along one of the edges at C . The lengths of the sides of the right triangle thus formed on the instrument are noted. The horizontal distance BQ is measured. Then PQ is computed by proportion. The height of the instrument, which equals QR , is added to the result to obtain PR . The proportion used depends upon the theorem:

If two triangles are similar, the homologous sides are in proportion.

When a horizontal distance PQ is to be determined by use of the geometrical square, the instrument is held directly over P , and the edge AB is sighted toward Q . The readings on the instrument are noted as in the problem above. The height



BP of the instrument above the base line *PQ* must be known or found. Then *PQ* is computed by a proportion, which is determined from similar triangles.

We are positive that the boys and girls in any secondary school would gladly and easily make such instruments as those described above, and that the interest and geometrical insight which would attend the practical use of them in out-of-door problems would more than repay the effort. We unreservedly recommend such work to teachers of geometry.



SOME LABORATORY EXPERIMENTS INVOLVING REAL CHEMICAL PROBLEMS

Many pupils look upon chemistry as an occult science. It is associated in their minds with curiously shaped apparatus, explosive mixtures, evil smells, a maze of formulae, and most uninteresting lessons in a text book entitled "Elementary Chemistry." Such pupils have failed completely to make connection between their class work and experiments on the one hand, and the world of applied chemistry beyond the laboratory. True, certain so-called applications of chemistry may have been pointed out, usually as a kind of afterthought following an especially bitter dose of chemical theory. The pupil's feeble spark of interest has been too completely destroyed to be rekindled to any consuming flame by such a method. So he fails to see in what he is called upon to learn, anything which will help him solve his own individual problems.

Several reasons for this condition may be pointed out. Teachers and a class are loaded down with a burden of subject-matter. So many pages of text must be covered, a corresponding number of laboratory experiments performed, and accompanying notebooks written up. Under this burden the teacher tends to emphasize completeness rather than suggestive methods of presentation. To the teacher, with his thorough knowledge of the subject, the natural order of presentation seems to be: first, theory, text-book assignments and recitations; second, experiments to show how the theory works or to illustrate the topics studied; third, applications, if any. Is this order adapted to the immature mind of the pupil? Chemistry, from the standpoint of pure science, may demand such a presentation, but does not the science of teaching chemistry to growing young people demand the reverse order of presentation?

Facts persist in memory only when fixed by extraordinary conditions, or when a keen live interest which perceives their usefulness is appealed to. The successful chemistry teacher is the one who can most completely supply his pupils with a large variety of such keen interests. It is the duty of the teacher to arouse the interest in his pupil, and it is the function of the laboratory work, recitation, and text, to provide the food and stimulus under which this interest may thrive.

In the laboratory the pupil should find himself purposefully working out the solution of real problems which he feels to be worth while because they are his own. Once the pupil feels this, he is not only willing but eager to repeat his work until satisfactory results are obtained and tasks which seemed rigorous are accomplished with enthusiasm.

If this be true, the method of presentation which will best arouse the interest should be the teacher's first concern. Hence the starting point should be made with the discussion of values and applications in relation to the facts of every-day experience in the home, school, and immediate surroundings of the pupil. Here is a motive which will not fail at the first difficulty, which will help the pupil over the hard places with a minimum of effort on the teacher's part. On all sides, the chemistry teacher is surrounded with excellent material for experiments which will deal with real problems possessing this powerful appeal.

No more direct method of arousing interest and securing enthusiasm can be found than asking the pupil himself to secure the materials for experiments, bringing them from home, from the grocery store, or any other source that he chooses. This chance to be of real assistance to the teacher gives him the dignity of a co-worker, and puts the work at the outset upon a higher plane than that of a formal set task.

Early in the year members of the class are asked to investigate the kitchen, pantry shelves, medicine cabinet, and prepare a list of chemicals in daily use. This list is kept and, as the course proceeds, the various items are checked off after more intensive study. This list is easily made, and often helps the pupil in connecting the facts he is learning with every-day experience, and thus it aids in arousing his interest.

The following experiments have been tried in this school and found successful in no small degree in supplying and developing interest and a strong motive for pursuing topics further than the next examination. No claim for originality is made. Many teachers are using similar experiments and with like inspiring results. The number of conventional textbook experiments is still too great, but it is diminishing and will diminish as fast as the other kind may be devised.

TESTING THE HARDNESS OF SPRING AND MINERAL WATERS

This experiment is performed after pupils have learned simple tests for the salts most commonly found in ground waters. Each pupil is asked to secure a suitable sample, water from a spring, artesian well, or a bottle of mineral water from the drug-store. A great variety of samples, from widely different sources, always results. At least one pupil may be asked to test the water used in the school boilers. The laboratory directions follow in full:

(a) Weigh a clean, dry, porcelain evaporating-dish. Weigh into it 100 grams of sample. Place on the steam-bath and evaporate to dryness. If necessary, finish the evaporation in an air-bath at a temperature of 120° C. Again weigh the dish and its contents. The weight of the residue is the amount of total dissolved solids.

(b) While evaporation is going on, to separate portions of the water, apply tests for chlorides, sulphates, nitrates, carbonates. Perform any other tests which the instructor may suggest, to suit individual problems. Record the tests as *very positive*, *positive*, *trace*, or *negative*.

(c) Fill a burette with a soap solution made by diluting ordinary liquid soap (used in the school) with three times its volume of distilled water. Place 100 c. c. of the water you are testing in an Erlenmeyer flask. Add a few drops of the soap solution and shake. Continue adding the soap solution, a few drops at a time, and shaking until precipitation ceases and suds form. The number of c. c. of soap solution used indicates, comparatively, the hardness of the water.

(d) Dissolve the residue in the porcelain dish in a little dilute hydrochloric acid. Note whether a gas (carbon dioxide) is liberated. This will check the test for carbonate. Using a clean platinum wire and the hydrochloric acid solution, examine the spectrum of the residue. What elements are indicated by this test?

(e) What reasons can you see for softening the water to be used for laundry purposes and in steam boilers? What method can you suggest for softening the water which you have analyzed? Write equations for any reactions that have taken place in this testing.

DETERMINATION OF THE PERCENTAGE OF AMMONIA IN HOUSEHOLD AMMONIA WATER

This experiment accompanies the study of acids, bases, and salts, and serves thoroughly to fix this important topic. It has to do with real material of importance in daily use, and the reaction of the class towards this experiment is far different from that towards the analyses of test solutions made up in the laboratory to practice upon.

Bring from home or purchase at your grocery store, a sample of commercial household ammonia. This sample should be not less than one-half pint in volume and should be brought in a tightly stoppered bottle. It is also necessary that it be part of a fresh bottle, not a portion of one which has stood any length of time unstoppered. Using the burettes and cochineal as an indicator, determine by the method of titration the number of c. c. of 10 per cent hydrochloric acid required to neutralize 25 c. c. of sample. The exact amount of HCl in 1 c. c. of the standard acid solution has been determined and is given on the board. Write the equation and calculate the exact amount of NH_3 in the 25 c. c. of sample used. Express the result in per cent.

Tabulate your result with those obtained by other members of the class. Note the brand, manufacturer, cost per quart, as well as its value expressed in per cent of ammonia. Determine the cost per quart reduced to a 1 per cent solution, by dividing the cost per quart by the per cent of ammonia found. This enables you to compare the value of various brands directly, that giving the lowest figure being the most economical to buy. Record the results of your titrations and give your calculations in full.

Report the results of your analysis to your family and to your grocer, with recommendations as to the best brands to purchase.

DETERMINATION OF THE PERCENTAGE OF ACETIC ACID IN VINEGAR

The preceding experiment on the analysis of ammonia water aroused such interest that the class wanted more work of the same character, and they were given the following experiment on the analysis of vinegar:

Bring from home or purchase at your grocery store, a sample of vinegar; preferably of the variety that you use at home. Fill a clean, dry burette with a portion of the sample. Fill a second burette with a solution of sodium hydroxide containing exactly 50 grams of NaOH to the liter. Draw off exactly 25 c. c. of the vinegar into an Erlenmeyer flask. Add 200 c. c. of distilled water, seven or eight drops of a 5 per cent solution of phenolphthalein, and titrate exactly with the sodium hydroxide, until the pink color characteristic of this indicator in alkaline solution is just reached. Repeat the titration until agreeing results are obtained.

One c. c. of the sodium hydroxide solution contains .05 grams NaOH. Write the equation for the neutralization of acetic acid by sodium hydroxide. On the basis of this equation, calculate the amount of acetic acid $\text{HC}_2\text{H}_3\text{O}_2$, corresponding to 1 c. c. of the sodium hydroxide solution. Find the number of grams of acetic acid in 25 c. c. of the vinegar analyzed. With a hydrometer, determine the specific gravity of your vinegar. Now find the weight of 25 c. c. of sample. From the weight of 25 c. c. of vinegar and the weight of acetic acid contained in it, calculate the percentage of acetic acid. Measure the volume of the original container and find the cost per quart. Record

these facts, along with the brand, manufacturer, and variety of the vinegar analyzed. Record, also, the amount of sodium hydroxide used in titration, the specific gravity, the percentage of acetic acid stated on the label, if given, and give your calculations in full.

An idea of the character of the results obtained by the class in these two experiments may be gained from the following tables:

ANALYSES OF AMMONIA

BRAND	PER CENT OF NH_3	COST PER QT.	COST PER QT. PER 1%
Elston	1.20	10	8.33
Elston	1.11	10	9.01
Kenwood	2.41	13.3	5.52
Standard	2.13	14.3	6.71
Standard	2.16	14.3	6.62
Excelsior .....	.54	7.2	13.33
Household	7.5	34.2	4.56
F. F. F. F. ....	.48	10	20.83
Red Riding Hood.....	3.10	12.5	4.03
King .....	.90	10	11.11
Druggist's	9.66	40	4.14

ANALYSES OF VINEGAR

BRAND	PER CENT ACETIC ACID	PER CENT BY MFR.	COST PER QT.	VARIETY
Matchless	3.96	..	10c	Cider
Matchless	4.08	..	10c	Cider
King Cereal	3.95	..	10c	Cider
Webb	4.16	4	10c	Cider
Cross & Blackwell.....	5.45	5.5	35c	Malt
Stock	4.3	..	5c	Distilled
Red Riding Hood.....	4.3	..	10c	Cider
Red Jacket	4.70	..	10c	Cider
None Such	4.08	4	15c	Cider
Trojan	3.91	4	10c	Distilled
Aeneid	2.5	..	5c	Cider fermented at home

Results of the class work, when tabulated on the board, showed at once great variations in the value of ammonia water and very little variation in the percentage of acetic acid in vinegar. The reasons for this produced a lively discussion of standards of purity as controlled by law in the one case and uncontrolled in the other.

THE DETECTION OF SULPHUR DIOXIDE IN FOOD PRODUCTS

In much the same way a great variety of food products were examined by the class to see whether sulphur dioxide or a sulphite had been used as a preserving agent. The list of products examined included dried and preserved fruits, canned vegetables, meats, and several varieties of cooked and uncooked sausage.

(a) Weigh out 50 grams of sample, place in a large flask, barely cover with distilled water, and add 15 grams of granulated zinc and sufficient pure hydrochloric acid to produce rapid evolution of hydrogen. The hydrochloric acid used should first be tested for its freedom from sulphates, as these would interfere with the test. Over the mouth of the flask place a filter paper which has been moistened with a solution of lead acetate. Any sulphur dioxide which may be present will be reduced by the nascent hydrogen and hydrogen sulphide formed. This will be indicated by a brown stain on the filter paper, where the hydrogen sulphide will have deposited lead sulphide black in color. The formation of such a brown stain, then, proves the presence of some sulphite or sulphur dioxide in the material examined. Record the test as *negative*, *trace*, or *positive*.

(b) Place another 50-gram portion of sample in a flask, cover with distilled water as before, and add 25 c. c. of hydrogen peroxide. Shake occasionally for a period of ten minutes, and filter. Test the filtrate by adding barium chloride and 5 c. c. of strong hydrochloric acid. A white precipitate proves the presence of a sulphate which has been formed by the oxidation of any sulphurous acid or sulphite present in the food by the hydrogen peroxide. Record this test, also, as *negative*, *trace*, or *positive*.

(c) Record, not only your own results, but also the materials tested and the results obtained by the other members of your section. Write equations for the action of zinc and hydrochloric acid; sulphur dioxide and nascent hydrogen; hydrogen sulphide and lead acetate; sulphurous acid and hydrogen peroxide; barium chloride and sulphuric acid.

The discussion resulting from this experiment concerning food preservatives had real experience as a background and left a permanent impression upon nearly every pupil.

Space does not permit of a full description of other experiments in which the pupil provides his own material. A partial list includes the following:

THE ANALYSIS OF A SILVER COIN OR SCRAP PIECE OF STERLING SILVER

The silver is recovered from solution in nitric acid by treatment with copper. The cement silver is washed free from copper salts, dried, and weighed. Per cent of silver found is calculated. Per cent of copper ob-

tained by difference. The refined silver is cast into a button, mounted as a stick-pin, and in some cases etched with designs or class numerals.

THE QUALITATIVE EXAMINATION OF BAKING POWDERS

Directions for a qualitative examination of baking powders are found in several laboratory manuals. The real problem lies in having the pupils determine by the use of these tests which brand is the most desirable. The tests are not the end of the experiment, but the means to make a real analysis. The motive in this kind of testing is real and impelling.

THE PREPARATION OF ALCOHOL BY FERMENTATION OF BROWN SUGAR WITH YEAST

The alcohol is distilled off, dried over quicklime, and redistilled. This experiment is especially valuable, as it gives the pupil a real experiment involving fractional distillation. He has a pure product as the result of his work.

THE ANALYSIS OF LIQUID SOAP USED IN THE SCHOOL

This experiment grew out of a complaint about the quality of the liquid soap used throughout the school. Samples of this soap, and of that furnished by other firms, were tested by various members of the class. This material required a real analysis. Samples of the various brands were titrated against standard acid to find per cent of free alkali and against a 5 per cent solution of calcium chloride to determine softening power.

Not only is there an unlimited number of such experiments suitable for class use, if we set about devising them, but in addition pupils should be encouraged to bring in any material which they want to investigate, to test it, and analyze it if possible. The chemistry laboratory should be used at other times than the assigned periods. Such individual problems as the following are suggestive:

TESTING TEA FOR DYES, SUCH AS PRUSSIAN BLUE

TESTING CANNED CHERRIES FOR DYES AND BENZALDEHYDE

TESTING POWDERED SUGAR FOR FLOUR OR STARCH

TESTING CANDIES FOR COAL-TAR DYES, GLUCOSE, AND FLOUR

A pupil in the seventh grade became interested in testing some cheap candy bought near the school. The chemistry department was called upon to help. The results of the testing were given in a morning exercise. As a result a rule forbidding the buying of cheap candy from this source was adopted and lived up to by the entire school.

TESTING THE ROOMS AND LABORATORIES OF THE SCHOOL FOR THE AMOUNT OF CARBON DIOXIDE IN THE AIR

These tests were applied to typical class-rooms throughout the school by a member of the chemistry class, at the request of the physics class, who were engaged in studying the ventilation system. The results of this testing are included in the article on *Heating and Ventilation—a Problem in Applied Physics*.

SCHOOL HEATING AND VENTILATION—A STUDY IN APPLIED PHYSICS

Too many experiments in elementary physics are performed from the standpoint of the "science," too few concern directly the topics in which the boys and girls are interested because they are immediately practical or related to common experience. Great progress already has been made in the elimination of meaningless, quantitative, experiments. The reorganization of the experimental work so as to emphasize the practical and the applied aspects of physics must follow if this subject is to occupy its rightful place in secondary education. This paper describes one example of such applied work which proved stimulating and instructive to a class.

The great increase in the number of students has resulted in the erection of great high-school buildings which offer unequaled opportunities for the practical study of the problems of heating and ventilation. Almost all high-school buildings have systems of forced ventilation, differing widely in principle and still more in efficiency. The thorough testing of such systems by a physics class not only provides interesting, practical work for the class, but may also prove of direct service to the school community. Definite knowledge of the shortcomings and inefficiency of a system may not mean the installation of a new and adequate one, but very often much improvement may result in practice through the suggestions which a physics class is able to make after a comprehensive survey.

The pupils were first asked to make a study of the heating-plants in their own homes and at the next recitation to report to the class the results of their investigation. The common methods of hot-air, hot-water, steam, and vapor heating were studied in this way by first-hand methods. Pupils of former years had prepared large colored diagrams illustrating these fundamental systems, and these were used in the class discussion. They served in some cases to correct wrong impressions, and in others to bring out interesting modifications of heating plants which investigation at home had revealed. The discussion of the advantages and disadvantages, the cost of installation, the conditions under which each system is most efficient, was spirited and showed the interest which this personal contact aroused. A diagram

of the home system, with suitable explanation, was required in the notebook of each pupil, and counted as a regular laboratory experiment.

The study was then extended to the school heating system. This is probably unique, from the fact that three different principles are utilized. The school lunchroom and library are in a separate building, which is heated by a furnace; the school proper is heated by steam, while the basement rooms, used as shops and laboratories, are heated by hot water, the condensed steam flowing through these radiators on its return to the boilers. In addition, the ventilation system employs the indirect use of steam heat to warm the air drawn in from out of doors. A study of the school system thus gives opportunity to every pupil by direct observation to become familiar with the three common methods of heating.

The problem of ventilation was then discussed by the class and defined as follows: "Good ventilation means the adequate supply of fresh clean air at a proper temperature, the removal of the used and foul air, and the maintenance of a proper amount of water vapor in the air of all rooms." The methods of home-heating were then reviewed to see how they assisted in securing adequate ventilation. The problem then put before the class was an investigation of the efficiency of the school ventilating system.

The school plant was studied that the class might understand its work. In the attic a powerful fan draws in air from out of doors through bags that are laundered weekly. A bag which has been in place for a week is an instructive lesson to the student. The air is then warmed by steam radiators and forced down through flues to each classroom, which it enters horizontally, near the ceiling. On the same side of the room, near the floor, the vent for foul air leads up to openings in the roof. The escape of foul gases from toilet-rooms and laboratories is assisted by the use of a suction-fan, also in the attic. Incidentally, the pupils discovered that this system was not planned for when the building was constructed, but was installed afterwards. The cold-air openings, which formerly led in under the radiators, had been closed up, though their old positions were easily noted. The wisdom of attempting to force hot air down to the basement was questioned, and the effect of open windows and doors on the efficiency of the system became another question well worth investigation.



PUPILS USING ANEMOMETER AND SLING-PSYCHROMETER

The use of a standard anemometer* for determining velocity of air-currents and a sling-psychrometer for rapid determinations of relative humidity was explained to the class and a few practice deter-

*The Tycos type of instruments secured from the Taylor Instrument Company of Rochester, N. Y., was used in this work.

minations made. The class was then divided into sections, and these groups, working at convenient times, determined the number of cubic feet of fresh air entering the various rooms in the school under ordinary working conditions, the windows being left just as they were found. Since the maximum number of pupils using the room at one time was known, the number of cubic feet per person was easily found. It is generally believed that 2,000 cubic feet of fresh air are desirable hourly for each individual, and the results were judged on this basis. Other groups of pupils used the sling-psychrometer to determine the temperature and relative humidity at varying times and under varying conditions. They noted the relative location of inlets for fresh air and outlets for foul air in the various rooms, to see whether the proper circulation throughout the room was obtained. In several rooms dead air-space was in evidence. The windows throughout the school were then carefully closed, and the determinations repeated in a number of rooms, to see whether this condition would materially increase the efficiency of the system.

A member of the chemistry class was called upon to test the air in certain rooms for its carbon dioxide content, using the Wolpert carbacidometer. These tests served to complement the work of the physics class and further confirmed its results.

The following report of the class survey was submitted to the school authorities, and shows its value to the school community as well as to the pupils conducting the tests:

TABLE OF TESTS FOR AMOUNT OF CARBONIC ACID

FLOOR	ROOM	CUBIC PARTS		QUALITY	REMARKS
		CMS. PER			
		OF 1,000			
		AIR RE- OF			
		QUIRED CO ₂			
Basement	Physics Lab.	27	1.19	Bad	Windows shut
Basement	German Room I	20	1.62	Very bad	Windows shut
First	Gymnasium	42	.76	Fair	Windows open
Second	Second Grade	31	1.03	Bad	Windows shut
Second	Third Grade	40	.80	Fair	Windows shut
Third	Seventh Grade	45	.70	Fair	One window open
Third	Eighth Grade	50	.63	Good	Windows open
Third	Tenth Grade	47	.67	Fairly good	Windows open

TABLE SHOWING EFFICIENCY OF VENTILATION SYSTEM

Room	VELOCITY PER MINUTE	AREA OF INLET		Cu. Ft.		MAX- IMUM No. OF PUPILS	Cu. Ft.		REMARKS
		PER IN	SQ. FT.	AIR PER HOUR	OF PUPIL PER HOUR				
							PER HOUR	EXCESS OR DEFI- CIENCY	
Physics Lab.	128	1,421	10,913	0	24	455	-1545	Windows and doors closed.	
German II	0	1,215	0	0	18	0	-2000	Windows closed, doors open.	
First Grade	218	2,576	33,731	0	30	1124	-876	Door open.	
Gymnasium { north ... { south ...	418	4,843	121,462	0	322	483	-1517	Several windows slightly open.	
	121	4,683	33,998	0	38	1143	-857	All windows slightly open.	
Second Grade	233	3,108	43,450	0	29	1678	-322	One window slightly open.	
Third Grade	261	3,108	48,671	0	28	2423	+423	One window slightly open.	
Eleventh Grade	479	2,354	67,854	0	25	1960	-40	One window half open.	
Music Room II	347	2,354	49,010	0	22	630	-1350	Windows and doors closed.	
General Science	233	1,022	14,288	0	33	832	-1168	One window slightly open.	
Music Room I	279	1,641	27,470	0	33	2012	+12	Two windows slightly open.	
Art Room	356	3,108	66,387	0	30	2095	+95	One window slightly open.	
Ninth Grade	337	3,108	62,843	0	49	3188	+1188	Three windows half open.*	
Tenth Grade	695	3,748	156,250	0	25	1716	-284	Window and transom open.	
Twelfth Grade	230	3,108	42,890	0					

*The three open windows were immediately below the ventilator, causing a direct short-circuiting of the air currents.

TABLE OF RELATIVE HUMIDITIES*

ROOM	DRY- BULB TEMPERA- TURE	WET- BULB TEMPERA- TURE	DEGREES OF COOLING OR DIFFERENCE	RELATIVE HUMIDITY
Physics Lab.	67.5	49	18.5	22%
Chemistry Lab.	63	45	18	18%
French II	69	50	19	22%
German I	69	50	19	22%
Shop	67	49	18	23%
Kindergarten	66.5	47	19.5	18%
Gymnasium	66.5	44.5	18	19%
Third Grade	70	51	19	23%
Gen'l Science	69.5	49.5	20	19%
Eleventh Grade	66	48	18	22%
Ninth Grade	68	48	20	17%
Eighth Grade	64	45.5	18.5	18%
Fifth Grade	66	49	17	26%
Front Study	68	49	19	21%
Twelfth Grade	67	55	12	46%
Art Room	68	52	16	31%

Upon the above tables the physics class base the following conclusions:

1. The ventilation system is fairly adequate to the needs of the third floor, nearly so for the second floor, but entirely inadequate for the rooms on the first floor and in the basement.

2. The closing of all windows throughout the building does not materially increase the efficiency of the ventilation system, unless it be to make for a better circulation of air from the ventilator through the rooms.

3. The location of vents in the laboratories is poor and entirely inadequate to remove objectionable gases; in fact, it serves rather to disseminate them throughout the building.

4. The relative-humidity table shows the air throughout the school to be extremely dry, averaging less than 25 per cent, whereas it should be not less than 40 per cent. This may easily be corrected by supplying radiator pans for the rooms on the first floor and basement, and by evaporating water into the air as it enters the ventilating system. This could best be done by using an open trough heated by a steam-coil to produce rapid evaporation.

5. The temperature of air entering the rooms from the ventilating system is not adequately controlled, being generally too warm. Warm air produces a feeling of stuffiness and discomfort which is usually associated with foul air.

6. In several rooms when windows are closed the carbon-dioxide content of the air reveals the lack of adequate ventilation and in general confirms the results obtained by other tests.

*These results were obtained during a period of severely cold weather, the condition which would best reveal any failure to maintain the proper relative humidity.

7. If windows are used for purposes of cooling and ventilation, as generally is the case, the expense of operating the fan system is, from the standpoint of economy, very wasteful.

Some of the results of the class work were given to the whole school at a morning exercise and aroused much interest. This was especially true in the fourth grade, where considerable time was spent in studying common methods of heating, repeating some of the simple experiments which had been performed in the morning exercise, and using the colored diagrams of the different systems. As a lesson in English as well as in science the whole grade was asked to write a description of these experiments and an explanation of what they showed. The paper which was selected as the best is given below in full.

No. I

We placed a candle upright on a saucer, and a triangle around the bottom of the candle. Then we placed a lamp chimney over the candle, so it rested on the triangle. In this way a draft came through the chimney from the bottom. A piece of lighted punk was put under the chimney, and the smoke rose through the chimney and came out at the top. This showed that there was a draft from the base of the chimney through it.

No. II

For this experiment we used the same apparatus as before, only the triangle was removed and the chimney rested on the saucer, which was filled with water, thus sealing the base of the chimney. The candle flickered and gradually went out. This shows that fire needs air.

No. III

The same apparatus was used as before; also a piece of cardboard put upright in the chimney, dividing it in half. This time the candle did flicker a bit, but it did not go out. This is because there is a circulation of air going in at the top at one side and out the other. This was proved by placing lighted punk at one side. The smoke went in and down that side and up and out the other.

Henry.

Groups of pupils in the fourth grade studied further the different systems of heating and prepared the following statements, which were submitted to the physics class for correction:

HOT-WATER HEATING

Hot water is one system of heating. Water comes from the city main through underground pipes to different houses. Then the water goes through pipes that circle round the inside of the furnace. The water is then heated and goes up into the pipes that lead to the radiators. The reason for this is that hot water expands. Then the water goes up to the first floor and the second floor, and so on. The water expands and rises, thus heating the dif-

ferent floors. When the water expands, it must have some place to expand into, so there is an expansion-tank on the top of the roof, and if the expansion overflows, there is a pipe leading to the sewer. If the water is cold when it leaves the radiator, it goes down and is reheated by the same heating process as before.

The steam heating is much cheaper, because only one set of pipes is needed, while in the hot-water heating two sets of pipes are needed. One of the advantages in hot-water heating is that the air is not so dry as steam heating, and also it can be regulated more easily.

Robert,	Mildred,	Elizabeth,	Walter,
Edward,	Marianne,	Van.	

The character of this fourth-grade work reveals the general interest in the problems of heating and ventilation aroused in the whole school by the work of the physics class and is further proof of the value of such a study to the school community.

HOT-AIR HEATING

Hot air is one of the ways of heating. The cold air enters in through the cold air inlet and is heated around the fire jacket. After it is heated, it passes through different parts of the house by means of pipes. Hot air rises, so as soon as the air is heated it goes up through the pipes into the rooms. When the air cools, it goes down the foul-air vent and into the furnace, and is carried with the smoke up the chimney. This system is used only in small buildings. It is less expensive than other systems.

Barbara,	Ruth,	Margaretta,
Lizette,	Caroline,	Margaret,
	Preston,	William.

STEAM HEATING

The steam-heating system is cheaper than most heating systems, because only one set of pipes is needed. The water comes from the city main, and is then turned to steam in the water-jacket. It goes up the pipes to the radiators. Then it circulates in the radiators. There is a valve at one end of the radiator to let the cold air out, so the hot steam will have room to get in. The steam condenses, and the water then goes down the same pipes that the steam comes up. When the water turns down the sharp corners, it makes the pounding noise that is often heard. When it gets down to the water-jacket, it is reheated.

Barrett,	Peggy,	Grace,
Eleanor,	Juniata,	Albert.

THE STUDY OF AN INDUSTRY

The study of textiles starts in the spring with planting the cotton and flax in the school garden. The crop is gathered in the fall at the time of the "County Fair." It is then threshed and retted on the front lawn and later put in storage till January. In the winter term the children scutch the flax, comb it on the heckle, spin it on

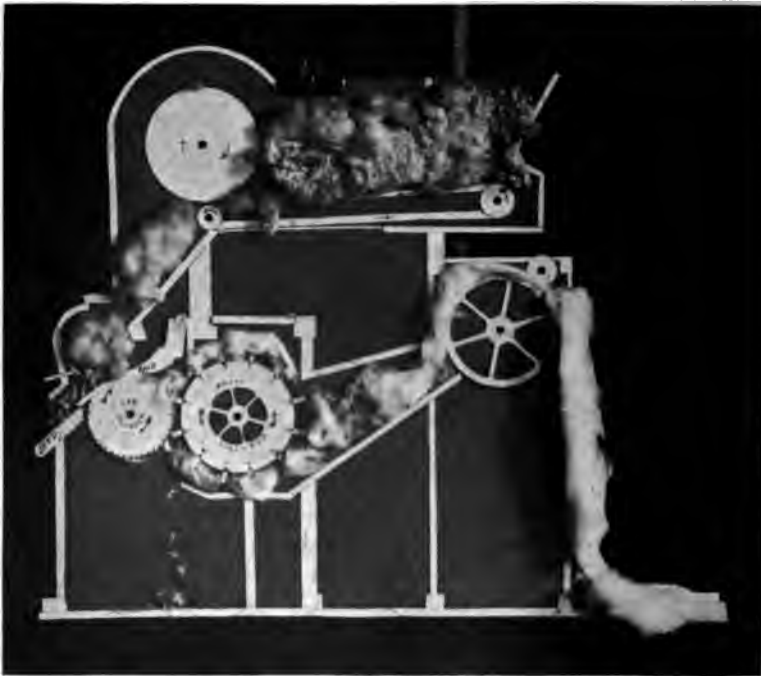


DIAGRAM OF A SAW GIN

the hand-spindles or spinning-wheels, and weave it on the looms. They have made all of these implements except the wheels in the shop under the direction of Mr. Wahlstrom. They card wool and cotton on the hand-cards, prepare warp for the looms on the warping-frame. We have a dozen different styles of looms on which they weave. They

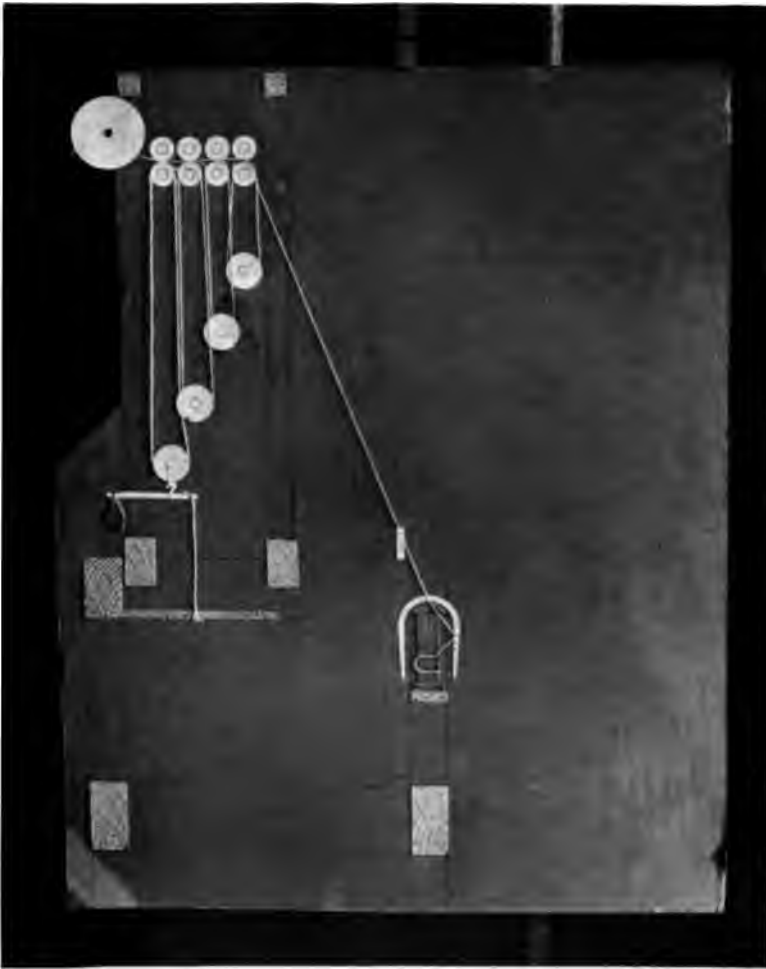


DIAGRAM OF ARKWRIGHT'S WATER FRAME FOR SPINNING

ave made a cotton-gin to seed the cotton which we get "in the
oll," unpicked, direct from the south. Thus they are brought in
irect contact with the material and the machines. They "learn to
o by doing," although the recitation is a very important part of the
rocess of mastering the subject.

Excursions have been made to Tetzner's Warping Works, the
ull House Textile Museum, the Field Museum, and Fiedler
rothers' Braid Works.



COTTON GIN MADE BY PUPILS. COTTON PLANTS FROM SCHOOL GARDEN AND RIPE BOLLS FROM THE SOUTH



CHILDREN WEAVING



SPINNING FLAX BY HAND



BOYS RUNNING COTTON THROUGH GIN MADE AFTER ELI WHITNEY'S SPECIFICATIONS. GIRL IN FOREGROUND PREPARING WARP. HAND-SPINNERS IN BACKGROUND



MORNING EXERCISE, 1918. LOOM FOR WEAVING LETTERS IN CENTER OF STAGE. KNITTING FRAME AT EXTREME RIGHT IN FRONT



MORNING EXERCISE, 1914. FLY-SHUTTLE LOOM IN FOREGROUND AND SMALL LOOMS MADE BY PUPILS IN BACKGROUND



MORNING EXERCISE, 1915, ON THE PLATFORM, FROM LEFT TO RIGHT: WARPING, SCUTCHING, HECKLING, GINNING, SPINNING. IN FRONT ROW EIGHT GIRLS SPINNING

The work is taken up from the standpoint of the problem, how to overcome the difficulties of each particular process. Thus, the improvement in modern textile machinery began with John Kay's invention of the fly-shuttle loom in 1732. This so accelerated the weaving that the women folks of the household could not spin thread fast enough. The spinning-jenny was the result. The development is followed through the automatic loom and the power-loom; finally, some of the simpler points in machine spinning are studied.

These changes took the operation of the machine outside of the home. The increase of power, the multiplication of machinery, and the application of steam, made necessary the housing and operation in large factories. This change from the home industries to the factory system we trace in textiles, clothing, flour, meat-packing, leather, iron-working, etc. The industrial revolution, though one of the most far-reaching and important of social changes, is not too difficult to make clear enough for young children to begin to think about it.

No other line of handwork is so well adapted to children's interests and muscular capabilities as that in textiles of the home industries. The wooden machines they can re-make in the wood shop, and the simple skill in handling them even fifth-grade children readily acquire in a few weeks' time. This ensures real and lasting interest.

Each year we have tried to use the work of previous classes and to carry the work a step farther than the preceding year. The pictures of the class in morning exercises in successive years show what we succeeded in doing each year. Thus in 1913, we could not spin cotton, although we tried, and we had no flax, but we made a loom that would weave letters. We made a knitting-frame and a warping-frame. In 1914 we tried to make a fly-shuttle loom and succeeded only in demonstrating it, but not in weaving with it. In 1915 our flax crop was good, and we succeeded in really spinning on hand-spindles and on the spinning-wheel. We also made a cotton-gin. The fly-shuttle loom remains for its full realization to be worked out by next year's class.



THE VALUE OF GAMES IN THE TEACHING OF MODERN LANGUAGES

Play is recognized as an educative factor essential to the fullest development of children, and the modern-language teacher finds the play instinct a most valuable asset in teaching in the primary grades. Through the game, work becomes play for the little child, and, in play he more easily acquires a vocabulary, and overcomes difficulties of speech.

Most modern-language teachers believe that the earlier a fundamental vocabulary can be functioned, the better, and the rote-songs and the games, with their repetition, are the most natural means to this end. The child, in his eagerness, will learn the words necessary to the game with less effort.

French and German are begun in the first grade in this school and with few exceptions, the children study throughout the elementary grades the language chosen by the parents in the beginning. These languages are rich in folk-songs and folk-games, and from this fund of material something appropriate is chosen for the first lesson. It may be nothing more than the simple game of "Sortir" (so named by a first-grade class). After having learned the names of a few objects, one child leaves the room while the class chooses one of these new words. The child then enters and asks each one: "Est-ce la chaise?" "Est-ce la table?" until he guesses the object. The one who answers his question by saying, "Oui, c'est la table," has his turn at guessing. This game is quite as popular in the fourth grade as in the first and is greatly enjoyed by the children of the sixth and seventh grades, where it becomes "Vingt questions."

Two of the favorite games used for the increase of vocabulary are, "Der Tisch ist gedeckt" and "La Toilette de Madame." In the first one each child represents an object on the table such as Messer, Gabel, Löffel. In the middle of the room stands an empty chair, behind which is the child who is setting the table. He calls: "Wo ist das Messer," and the one representing that object sits in the empty chair. When the child behind the chair calls, "Der Tisch ist gedeckt," all change seats, and whoever is left is the one who stands behind the chair the next time.

"La Toilette de Madame" is played in the same way by substituting the names of the objects of the toilet for those of the table and by using such sentences as, "Où est la brosse de Madame?" "La toilette de Madame est complète." It is obvious that these games may be played with a great variety of vocabularies. They may relate to animals, fruits, and vegetables, and the child who calls out the names may represent the gardener asking for his vegetables to plant, or the animal-keeper calling his pets.

The game of "Promenons-nous dans les bois" functions such expressions as, "I am putting on my shoes," "I am putting on my stockings." One child represents the wolf in his cave. The rest dance before him saying a little rhyme and then stop to ask, "Loup, loup, y es-tu?" The wolf replies, "Non, je mets mes bas," or "Non, je mets mes bottines," and so on before he may say, "Oui, sauvez-vous," and chase the others.

Or, again, in learning how to tell the time, the game of "Minuit" is much enjoyed. Some child impersonates the wolf. He is asked by each one in the class, "Quelle heure est-il?" If the wolf says, "Il est minuit," he chases the children and catches one who in turn becomes the wolf. He may, however, say any hour he pleases, and some children prolong the game by giving every possible hour before saying, "Il est minuit." Such a child will not soon forget how to tell the hours in French.

Then there are the imitative singing games, which enlarge the child's experience and help him to understand social manners and customs and how the children of other nations work and play. Two such games are "Die Waschfrauen" and "Wollt ihr wissen, was die kleinen Mädchen machen?" The one represents the activities of the washerwoman, the other the activities of the home. They are both given here:

DIE WASCHFRAUEN

Zeigt her eure Füße,
 Zeigt her eure Schuh;
 Und sehet den fleissigen
 Waschfrauen zu.
 Sie waschen,
 Sie wringen,
 Sie legen,
 Sie bügeln.
 Sie ruhen,
 Sie tanzen den ganzen Tag.

At the last line the children carry out the corresponding activity.

WOLLT IHR WISSEN?

Wollt ihr wissen, wollt ihr wissen,
Was die kleinen Mädchen machen?
Püppchen wiegen, Püppchen wiegen,
Heissa, heissa, hopsassa.

Wollt ihr wissen, was die grossen Mädchen machen?
Strümpfe stricken, Strümpfe stricken,
Heissa, heissa, hopsassa.

Wollt ihr wissen, was die kleinen Knaben machen?
Trommel schlagen, Trommel schlagen,
Heissa, usw.

Wollt ihr wissen, was die grossen Knaben machen?
Hut abnehmen, Hut abnehmen,
Heissa, usw.

Wollt ihr wissen, was die jungen Damen machen?
Knixe machen, Knixe machen,
Heissa, usw.

Wollt ihr wissen, was die alten Frauen machen?
Kaffee trinken, Kaffee trinken,
Heissa, usw.

It may seem that games are all we teach in the modern-language classes. It is true that play has the first place in the primary grades, but even there some time is given to simple drill and to easy conversation based on the vocabularies of the songs and games. It is also true that games continue through the grammar grades, but there they are played for the sake of the games themselves, since their value for vocabulary drill is less necessary. They are gradually given up and in the high school are replaced by conversation and the application of grammar to practical uses.

In the primary grades, in spite of all the repetition and drill, there develops a love of the language and a joy in its use. Little children take their new words and games home and repeat them to the family, while children of the second grade come into class saying, "Il est beau," "J'ai froid," "Je ferme la porte." "Petite classe aujourd'hui." It is this experience in the use of a language that gives meaning to it, and the child in his independent work tests his ability to use it.

When the child begins to read the language, again we find that the games and songs have helped him, for words learned and used in play are easily recognized and read. Verbs and idioms have been

learned unconsciously, and now when the teacher gives a word, the child is able to express his thought independently and build a new sentence with the word. These sentences are written on the board and become his first reading-lessons.

A third-grade class had heard, retold, and played the story of La Fontaine's *The Fox and the Crow*. One day the teacher asked each child to tell her something about the story. Here are some of the sentences they gave which were written on the board and read later:

Le corbeau est sur un arbre.
Le corbeau a un fromage dans son bec.
Le renard a faim.
Le renard désire le fromage.
Le renard dit: "Je flatterai le corbeau."
Le renard dit: "Bonjour, Monsieur Corbeau."
Vous êtes joli! Votre voix est excellente. Chantez."
Le corbeau dit: "Quoi, quoi. Oui, ma voix est excellente."
Le fromage tombe à terre.
Le renard ramasse le fromage.
Le renard dit: "Oui, votre voix est excellente, mais je préfère
• le fromage. Au revoir."

After a few weeks of this sort of work the children are able to read simple connected stories in a booklet, and from then on they make rapid progress in reading. Later they express themselves in little plays of their own composition. Their play about La Salle was an outgrowth of their work in history. Another was a Christmas play following a study of Christmas customs in Brittany. It is this form of creative work which is the best test both for the child and the teacher. In making the play the child discovers his command of words and idioms while the teacher sees where she has failed to make idiomatic expressions and sentence-structure function.

After seven years of drill, of independence of speech, and of creative work, we have seen children enter high school with a good vocabulary, a certain fluency of speech, and a fair understanding of sentence structure. They are then able to cope with more advanced grammar and more difficult reading with a feeling of power and pleasure, which children who have been given only grammatical drill and the easy, uninteresting reading material necessary for beginners, cannot experience. Therefore, we believe that play, through games, has proved its value in modern-language teaching.

HOW DRAMATIZATION OF STORIES HELPS IN TEACHING MODERN LANGUAGES

The utilization of the dramatic instinct in modern-language teaching has attracted the attention of all progressive language teachers, and there is no doubt that this practice has certain values which should not be underestimated. The first task in the acquisition of new languages, especially with young children, is to bring about a connection between the new sound-images and the old ideas of which the children are clearly conscious; the second is to get them to use the newly acquired terms. To attain such results, no better way can be found than to satisfy their desire to be active, to do something, for naturally there is very little impulse within the child which causes him to express himself in a language utterly foreign to him.

The first terms to be learned in German or French are the expressions of certain actions that can be carried out by the children in the schoolroom, for instance; to open and shut the door; to put a book or pencil on the table, on the chair, etc. But there is, of course, a limitation to these as we are dealing with classroom instruction, and a great many every-day activities would seem unnatural and out of place if performed in a schoolroom. Therefore, to extend this particular phase of our work, and to make it seem natural, it must be handled in a different way, and this can best be done by appealing to the child's dramatic sense and his love for imitation. As soon as the children begin to read, this dramatic interest is awakened. They have no sooner finished a story than the suggestion comes: Let us play it. Therefore we believe in beginning with simple dramatic work as early as possible, starting with any fairy-tale or story that lends itself to this purpose, and gradually proceeding to more elaborate plays. The fact that they are talking a language different from their own makes not the slightest difference. Their strong desire for acting easily overcomes this difficulty. Besides, we all know that a child is always willing and interested as long as he can do something, and a play no doubt furnishes the best stimulus for this. At the same time it offers a good opportunity to secure valuable ends. Of these the most valuable is perhaps the freedom from self-consciousness, which is entirely lost through the close attention, interest and

absorption on the part of the pupil. He feels that here is something worth doing and is inspired to use his very best effort to bring about the desired results. It must be said here that one must always bear in mind that these dramatic presentations are studied and performed mostly for the sake of the language and that the finished technique of acting must be secondary. We demand only that there be a genuine expression of thought. The play loses its chief value the minute we begin to make it an ideal performance from a dramatic point of view, because too much precious time must be taken from the all too limited language instruction. We believe in presenting many good plays as simply and informally as possible and in letting the children play them in the true sense of the word. This especially the third-grade and fourth-grade children ought to be encouraged to do with their stories, as it gives them a splendid opportunity to use what little they have acquired of the foreign language. But as the children grow older and develop more power, the demand for a real play becomes stronger. On account of their limited command of the language in the earlier stages of the work a ready-made play must be provided, adapted to the needs and interests of the pupils. But students already familiar with German or French might do a great deal in helping to shape the play under the guidance of the teacher, as was done, for instance, in a French Christmas play. The sixth-grade French class was reading some stories about Brittany. Among others was one telling of the customs at Christmas time. The children thought they would like to give a play, so they began to make one from this story. They planned what they should have as scenes and then decided on the dialog. Each child contributed some speech, and some children made up many lines. After these were completed, the Christmas songs and chorals were inserted, and the play was given. The teacher's part was to write these sentences correctly and help the children arrange the dialog from sentences which were written down whenever they occurred to them.*

The immediate values of dramatizations for modern-language instruction are as follows: (1) A play is a great aid in securing correct pronunciation. The children taking part in a play in a foreign language must be trained to pronounce and enunciate their words clearly and distinctly so as to be understood by an audience, and often by one not wholly familiar with the language. This result is

*See the play following this article.

brought about by the constant repetition which the rehearsals demand, and from which not only the child performing a certain part, but all the others profit at the same time, and which in a play loses all of its monotony, because of the intense dramatic interest. It trains the ear to a degree of accuracy that can hardly be secured by other means.

(2) There can be no doubt that the dramatic work is an excellent means of increasing the vocabulary, and a vocabulary gained in this way is of immeasurable value as it is not a group of isolated words but of words learned through connected sentences and immediately applied to action. Children realize that they are using the language to express thought. Usually this vocabulary is also quite different from the one the children have learned from their textbooks, containing more every-day expressions, and through its practical application it is mastered with great ease. Also simple idiomatic phrases can be most readily and naturally learned through dramatic dialog. Thus a "Wortschatz" of great variety becomes a permanent possession of the pupils and is used unconsciously by them in their conversation with each other.

(3) A play surrounds the children with the most natural condition of the language and affords them the opportunity to express themselves in a very natural way. It shows them that modern languages are for practical application, that they are living languages, in which they are to learn to express their thoughts with an ever-increasing fluency. It awakens a sympathetic understanding of the people and country whose language is studied and helps towards a deeper appreciation of their literature. Through the dramatic work they will not only have gained the language but also an insight into another people's beliefs and customs.

The material for plays given to children for the purpose of learning German or French must be taken from the realm of children's ideas and interests. It is always safe in the beginning to go back a year or two in order to find the subject-matter really suitable to the age of the child, as it has to be of such a character that it can be expressed in very simple language. The mistake has often been made of choosing plays which were too mature in character and the language of which was beyond the ability of the children. One ought to choose carefully the plays that have a distinct foreign setting related to either language, and also a distinct foreign content, intro-

ducing the pupils into German or French life, legends, history, customs, and ideas. From the wealth of the German legendary material, the best that we have used which have these characteristics are those about "Rübezahl," that mighty spirit of the *Riesengebirge* in Silesia. Several of these were dramatized and made into charming little plays. Once the children's interest was thoroughly aroused in this fascinating personality, it did not stop after the excitement of the play was over, but resulted in a strong demand for more tales about him. Another equally interesting personality prominent in the German myths is "der getreue Eckart," who appears as an old man with a long white beard, always ready to help children and those in need. Although he is not generally well known outside of Germany, nevertheless he figures in many stories which are well adapted for dramatization.

Every nation has certain beliefs and traditions which usually originated among the common people, nobody knows exactly how, but which have stayed with them for generations. In Germany these were mostly attached to the ignorant peasant class and are to some extent still current among them. They have offered very good material for dramatization, of which the following is an example. Several years ago a sixth-grade class presented a German Easter play, which was adapted from two Easter legends about some old beliefs current among the German people. Several girls start out on Easter morning before sunrise to wash themselves in a spring, the water of which has the magic power of preserving them from getting sick and growing old. But they must not laugh nor talk. Some mischief-loving boys hear of this, and by making the girls talk, spoil everything. They now in turn want the girls' help for a trick which they are going to play on some other boys. The latter believe a story told to them of a treasure hidden by a knight which can be found only on Easter day. The first party now buries a box with a sack of sand, and when the treasure hunters come to dig for it, they discover the trick that has been played on them, and the little play is brought to a very amusing end.

In the same way, beliefs current among the German children regarding certain animals can be made use of. The cuckoo, for instance, is a favorite bird among them, and besides being the first sign of spring in Germany, is considered to be a prophet. At his calls, the child will ask: "Kuckuck, wie lange leb' ich noch" (Cuckoo, how long shall I live), and he answers by his calls. These are counted

by the child and represent the number of years he or she is going to live. The fourth grade especially enjoys performing a little play about this wonderful bird, in which the children, after anxiously counting his calls, find out that they have been imposed on by mischievous boys who imitated the cuckoo from behind a bush. They are greatly relieved, however, for the thought of living 125 years, as they had counted, had not particularly appealed to them.



GROUP WHICH PRESENTED THE CHRISTMAS PLAY

With little children, such as those of the third grade, for instance, we try to do very informal dramatic work. They simply act out their stories after they have become thoroughly familiar with the text and make up their own speeches. A great favorite with the German class is the well known story of "der Spazierritt," in which a father and son drive their donkey to the city. They are criticised for their actions by each traveler who meets them, until they come to the conclusion that, in order to satisfy everybody, they must carry the donkey home. It is very amusing to see little children interpret this story, and the donkey, strange to say, enjoys the greatest popularity.

These examples show the kind of subjects that we choose for our dramatic work in modern-language teaching in the lower grades of the elementary school. Some plays of a more mature character,

however, have had a presentation. A class once gave "Reinecke Fuchs," which was adapted from Goethe's famous animal epic, and also "Hänsel and Gretel," the text of which was taken directly from Humperdinck's charming opera. The outcome of both was very satisfactory. All this dramatic work is for us of enormous value, because it helps to give the children fluency and a certain freedom for self-expression. The "Sprachgefühl," so indispensable for language study, and which is very hard to get through mere reading and writing, is developed within the children, or at least a start is made towards that end. In language work the child cannot learn by simply hearing and repeating, the ear alone cannot give him the feeling for the word. He must comprehend the thought through as many natural channels as possible and make it part of himself by actually expressing it in more ways than one.

DER HEXENRING*

Personen. Gretel, Trudel, Erna, Fritz.

Die Hexe.

Fünf Kobolde.

Der getreue Eckart.

I. SZENE

Ein freier Platz im Walde. Vier Kinder kommen auf die Bühne. Zwei oder drei von ihnen tragen Eimer.

Kinder (singend). Kuckuck, kuckuck ruft aus dem Wald:
Lasset uns singen,
Tanzen und springen.
Frühling, Frühling, wird es nun bald!
Kuckuck, Kuckuck, lässt nicht sein Schrein:
Kommt in die Felder,
Wiesen und Wälder,
Frühling, Frühling, stelle dich ein!

Gretel. Ei, hier ist es schön kühl, hier lasst uns spielen.

Fritz. Die Eimer mit Milch können wir ja auf die Seite stellen.

Trudel. Ja, hier ganz tief ins Gebüsch, dann werfen wir sie auch nicht um.

Erna. Also, schlägt vor, was sollen wir spielen?

Gretel. Den Dritten abschlagen.

Fritz. Ach nein, das ist zu langweilig.

Erna. Warum denn nicht Bäumchen, Bäumchen, wechsle dich?

Trudel. Na, ja, wer ist es?

*Copyright, 1915, by Anna T. Gronow.

This play was written by Mrs. Gronow, instructor in German, School of Education, University of Chicago.

Gretel. Ich will abzählen.

Eins, zwei, drei, vier, fünf, sechs, sieben.

Eine Frau, die kochte Rüben,

Eine Frau, die kochte Speck.

Ich oder du ist weg.

Alle. Du bist es, Fritz.

Fritz. Nun gut, sucht euch jeder einen Baum.

(Er steht in der Mitte; die andern drei wählen sich drei Bäume. Während sie wechseln, stellt sich Fritz unter einen der drei Bäume, so dass Erna übrig bleibt. Nachdem Erna ausgerufen hat, stellt sich Trudel unter einen verkehrten Baum und, als man es ihr sagt, wird sie verwirrt und stellt sich unter den Baum, unter welchem sich der Hexenring befindet.)

Bäumchen, Bäumchen, wechsle dich.

Alle. Du bist es, Erna.

Erna. Nun gut, Bäumchen, Bäumchen, wechsle dich.

Halt, Trudel, der Baum spielt nicht mit.

Gretel. Nein, der Baum spielt nicht mit.

Trudel. Na, dann bin ich dran. Ich stelle mich unter diesen Baum.

Erna. Bäumchen, Bäumchen, wechsle dich. So lauf doch, Trudel.

Trudel. Ich kann nicht.

Erna. Warum denn nicht?

Trudel. Ich kann mich nicht rühren, jemand hält mich fest.

Gretel. Stelle dich doch nicht an, Trudel.

Trudel. Ich stelle mich nicht an; meine Füße sind am Boden fest gewachsen.

Fritz. O Trudel, du stehst in einem Hexenring.

Gretel. Wirklich, da ist ein Hexenring, und du stehst mitten drin.

Trudel. Was ist denn ein Hexenring?

Erna. Ja, so redet doch, was ist denn ein Hexenring?

Fritz. Seht ihr die vielen Pilze dort auf dem Boden?

Mädchen. Ja, ja.

Fritz. Und seht ihr, dass die Pilze einen Ring bilden?

Mädchen. Ja.

Fritz. Nun, ein Hexenring ist ein Ring aus Pilzen. Die Pilze müssen so eng zusammen stehen, dass sie keine Öffnung lassen. Wer in einen solchen Ring tritt, ist in der Gewalt der Hexen.

Trudel. Dann bin ich in der Gewalt der Hexen?

Erna. Du arme Trudel, aber ich bleibe bei dir, ich gehe nicht weg von dir. Gibt es denn gar kein Mittel, um Trudel aus dem Hexenring zu erlösen?

Gretel. Doch, es gibt nämlich irgend eine Pflanze. Ich weiss nur nicht, wie sie heisst.

Fritz. Das ist die blaue Wunderblume, sie erlöst alle und öffnet alles.

Erna. So geht und sucht sie, während ich bei Trudel bleibe. Fürchte dich nicht, Trudel, wir werden dich schon erlösen.

Trudel. Meint ihr wirklich, dass ihr die blaue Wunderblume finden werdet?

Fritz. Ja gewiss, seid nur nicht bange.

Erna. Wenn aber die Hexen kommen?

Gretel. Die Hexen kommen nicht bei hellem Tageslicht.

Fritz. Und wir sind wieder da, ehe die Dunkelheit hereinbricht.

II. SZENE

(Es ist Abend. Die Hexe erscheint, sie trägt einen Zauberstab, mit welchem sie die Kreise zieht.)

Hexe. Aha, sie sind eingeschlafen. Nun habe ich beide in meiner Gewalt. Ich ziehe einen Kreis um dieses zweite Kind, und nun sollen meine Kobolde sie quälen. Heran, Kobolde, heran.

Kobolde. Hier sind wir, was befehlst du?

Hexe. Seht ihr die Mädchen da? So quält und neckt sie, soviel ihr könnt.

Kobolde. Juchhe, was für ein Spass!

Erster Kobold. Ich zupfe sie am Haar.

Zweiter Kobold. Und ich kitzle sie mit einem Zweig.

Dritter Kobold. Und ich brumme wie ein Bär.

Kinder. Die Hexe, die Hexe!

Trudel. O, lauf nicht fort, Erna.

Erna. Ich sitze auch fest, ich kann nicht fort.

Trudel. Bitte, Kobolde, lasst uns in Ruh.

Erster Kobold. Nein, wir lassen euch nicht in Ruh.

Zweiter Kobold. Wir wollen euch quälen.

Dritter Kobold. Und unsere Herrin, die Hexe, wird euch essen.

Kinder. O, Mutter, Mutter!

Vierter Kobold. Ha, seht, was hier im Gras steht.

Fünfter Kobold. Eimer voll Milch.

Vierter Kobold. Kommt, wir wollen sie austrinken.

Kinder. Sie trinken alle unsere Milch.

Erster Kobold. Warum weinst du, dummes Ding?

Trudel (ihm eine Ohrfeige gebend). Da, du Bösewicht.

Erster Kobold. Au, sie hat mich gehauen.

Hexe. Verschwindet, Kobolde. Jetzt kommen die anderen Kinder. Und wieder ziehe ich Kreise.

Trudel. Ach, Erna, nun kommen die andern auch in ihre Gewalt.

Erna. Sei still, sonst tötet sie uns.

Trudel. Nein, ich will nicht still sein. *(Laut.)* Fritz und Gretel, seid vorsichtig.

Hexe. Willst du wohl still sein, du Naseweis? Ganz still, oder ich töte dich.

Fritz. Ach, Trudel, wir haben nichts gefunden. Aber Erna, was hast du, und warum sprichst du nicht?

Hexe (Erna einen Schlag gebend). Es nützt dir doch nichts; er ist schon drin.

Fritz. Worin bin ich?

Hexe. In meinem Kreis, mein Söhnchen. Hi, hi!

Erna. Ach, und ich auch.

Fritz. Gretel, bleibe weg von hier.

Erna und Trudel. Ja, bleibe weg von hier, bleibe weg. Sie hat uns gehört.

Hexe. Still, ihr Dummköpfe.

Gretel. Ja, ich habe euch gehört, und ich werde euch erlösen, habt keine Angst.

Hexe (zornig). Dafür sollen meine Kobolde euch quälen. Heran, Kobolde, heran.

Kobolde. Hier sind wir, was befehlst du?

Hexe. Quält diese Kinder und fangt das andere, damit ich es in meine Gewalt bekomme.

Kobolde. Ha, welch ein Spass.

Heissa, wer tanzt mit mir?

Heissa, wer tanzt mit mir?

Lustig und munter kopfüber, kopfunter.

Immerzu ohne Rast, ohne Ruh, von Ort zu Ort,

Jetzo hier, jetzo dort.

Vierter Kobold. Nun schaut, was ich mit eurer Milch mache. (*Giesst sie aus.*)

Fünfter Kobold. Und ich trommle auf die Eimer. Tromm, tromm, tromm, tira rolla, rolla, rollala.

Kinder. Unsere schöne frische Milch.

Erster Kobold. Ich hätte sie beinahe gefangen.

Gretel. Noch lange nicht.

Zweiter Kobold. Warte, jetzt habe ich dich.

Hexe. Und ich auch. (*Will sie nach dem Ring ziehen.*)

Gretel. Hilfe, Hilfe! (*Ein alter Mann* erscheint.*)

Kobold. Der getreue Eckart.

Kinder. Wer ist das?

Eckart. Lass das Mädchen los, Hexe.

Hexe. Aber sie gehört mir.

Eckart. Lass sie los.

Hexe. Dann geh.

Eckart. Und nun erlöse auch die andern Kinder.

Hexe. Aber ich will nicht, sie gehören mir.

Eckart. Schau dich um, Gretel. Sieh, was da im Gras steht.

Gretel. Die blaue Wunderblume.

Eckart. Nun, pflücke sie und halte sie der Hexe ins Gesicht.

Hexe. Gnade, Gnade, Meister Eckart.

Eckart. Gib diese Kinder frei.

Hexe. Ich löse den Bann. Ihr seid frei. Aber weh euch, wenn ich euch wieder fange.

Eckart. Mach', dass du fortkommst, Hexe.

Hexe. Kommt mit, Kobolde.

See explanation about this man on page 150.

Eckart. Nein, ihr bleibt hier und tut was ich euch sage.

Kinder. Wer bist du?

Eckart. Ich bin der getreue Eckart. Ich helfe guten Kindern und strafe die Bösen. Kobolde, gebt den Kindern die Eimer zurück.

Dritter und Vierter Kobold. Hier habt ihr die Eimer.

Eckart. Und nun pflückt diesen Korb voll Beeren. Warum weint ihr, Kinder?

Kinder. Wir haben keine Milch.

Eckart. Fürchtet euch nicht, ihr werdet Milch bekommen. Aber sagt nicht, wer euch geholfen hat. Hört ihr?

Kinder. Wir wollen es nicht sagen. (*Hier bemerken die Kinder voll Erstaunen, dass ihre Eimer wieder voll Milch sind.*)

Fünfter Kobold. Hier sind die Beeren.

Eckart. Gebt sie den Kindern.

Kinder. Danke sehr, danke.

Eckart. Und nun führt die Kinder nach Hause. Bringt sie bis an die Haustür und dann verschwindet. Hört ihr?

Kobolde. Jawohl, Meister.

Eckart. Und ihr versprecht mir, Kinder, dass ihr nicht sagen wollt, wer euch geholfen hat?

Kinder. Wir versprechen es.

Eckart. Nun gut, lebt wohl, vergesst euer Versprechen nicht.

Kinder. Nein, nein, leb' wohl.

DER KUCKUCK

Personen: Emma, Frieda, Lotte, Max, Emil.

Szene: Eine grüne Wiese.

Die Mädchen (singend).

Kuckuck, Kuckuck, ruft aus dem Wald,

Lasset uns singen,

Tanzen und springen.

Frühling, Frühling wird es nun bald!

Emma. Jetzt haben wir aber wirklich genug Blumen gepflückt.

Lotte. Meine Hände sind so voll, ich kann nicht mehr halten.

Frieda. Kommt, wir wollen uns hier in das Gras setzen und die Blumen binden.

Lotte. Ja, hier ist es schattig. Ich bin auch sehr müde.

Emma. Hat jemand Bindfaden mitgebracht?

Frieda. Ja, ich. Er ist in dem Korb da. Und auch eine Schere.

Emma. Ich will sie holen.

Lotte. Wie wird die Mutter sich freuen, wenn wir ihr so viele Blumen bringen.

(*Ein Kuckuck schreit.*)

Emma. Horch, hört ihr, wie der Kuckuck schreit?

Lotte. Ja, er scheint hier ganz in unserer Nähe zu sein.

Frieda. Wisst ihr was, Kinder? Jetzt können wir erfahren, wie lange wir noch leben werden.

Lotte. Ei, wieso denn?

Emma. Ja, sage es uns. Das möchte ich doch auch gerne wissen.

Frieda. Nun, das ist sehr einfach. Wir zählen, wie oft der Kuckuck ruft, und so viele Jahre leben wir dann noch. So sagt wenigstens unsere alte Köchin.

Lotte. Das ist ja sehr nett. Aber wer will zuerst zählen?

Frieda. Ich nicht.

Emma. Ich auch nicht. Ich will zuerst hören, was der Kuckuck euch sagt.

Lotte. Ach was, seid doch nicht so albern.

Ich will abzählen:

Eins, zwei, drei, vier, fünf, sechs, sieben,

Eine Frau, die kochte Rüben, .

Eine Frau, die kochte Speck,

Ich oder du muss weg.

Du bist zuerst dran, Emma.

Emma. Na, meinerwegen. Ich glaube ja doch nicht dran.

Frieda. Horch, da ruft der Kuckuck wieder. Jetzt pass aber gut auf, Emma.

Emma. Kuckuck, wie lange leb' ich noch? (*Sie zählt bis drei.*)

Kuckuck (ruft). Kuckuck, Kuckuck, Kuckuck!

Emma. Ist das alles? Nur dreimal hat er gerufen. Also leb' ich nur noch drei Jahre? Hahaha!

Lotte. Arme Emma, nur drei Jahre, das ist wirklich zu wenig.

Frieda. Nun, Lotte, jetzt bist du dran. Wir wollen mal sehen, was dir der Kuckuck sagen wird.

Lotte. Gut, ihr könnt ja mit mir zählen. Kuckuck, wie lange leb' ich noch? (*Zählt bis zehn.*)

Kuckuck (ruft zehnmal). Kuckuck, Kuckuck, usw.

Frieda. Da hast du's Lotte, noch zehn Jahre wirst du leben. Na, das ist schon besser als Emma. Hahaha!

Emma. Du brauchst nicht über uns zu lachen. Warte nur erst ab, was dir der Vogel sagen wird.

Frieda. Puh, lass den Vogel doch rufen, so viel er will.

Lotte. Da ruft der Kuckuck. Jetzt, zähle.

(*Kuckuck, ruft immerzu bis hundert.*)

Frieda. Kuckuck, wie lange leb' ich noch? (*Zählt eins, zwei, drei, vier —bis zwanzig.*)

Emma. Nur weiter.

Frieda. Dreissig, einunddreissig, usw.

Lotte. Nur immer weiter.

Frieda. Fünfzig, sechzig, usw.

Emma. Nun wird's aber lustig. Du wirst ja schrecklich alt, Frieda.

Frieda. Neunzig, hundert. Jetzt ist es aber genug. Willst du wohl gleich stille sein, du dummer Kuckuck. Ich zähle nicht weiter.

Lotte. Hundertundzwanzig. Jetzt ist aber das Mass voll. Hahaha!

Frieda. Willst du wohl stille sein Kuckuck. Du sollst aufhören! Ich

will nicht solch' eine alte Hexe werden.

(Sie nimmt einen Stock und läuft auf den Busch zu. Zwei Knaben springen hervor.)

Max und Emil. Kuckuck, Kuckuck!

(Alle lachen.)

A CHRISTMAS PLAY

(Made by a sixth-grade class.)

La Scène: Une salle très simple, une cheminée, une porte, une fenêtre. La grand' mère est assise près de la cheminée. Elle prépare de la laine filée. Les enfants garnissent la salle avec des branches de pin.

La Grand'mère. Venez Marie, aidez-moi.

Marie. Oui, grand'mère. *(Elle vient et l'aide avec le fil.)* Que faisiez-vous à Noël quand vous étiez petite, grand' mère?

La Grand'mère. Il y a bien longtemps de cela, mes enfants, mais peut-être que je peux m'en souvenir. Voyons.

Yvonne. Oh, racontez-nous cette histoire, grand'mère.

La Mère (qui entre à ce moment et met des plats sur la table). Si vous êtes bien sages, grand'mère racontera l'histoire plus tard.

Yvonne (presqu'en larmes). Non, je la veux maintenant. *(Elle se cache sous la table.)*

La Mère. Nous sommes très occupées maintenant. Il faut tout préparer pour ce soir. Louise, avez-vous les noix?

Louise. Oui, ma mère. Je vais les chercher. *(A Jeanne.)* Venez, ma soeur.

(Elles vont chercher les noix. Reviennent, s'asseyant au coin de la cheminée et les cassent.)

Susette. Moi, j'irai chercher le bouquet, mère. Au revoir. *(Elle met son bonnet, et son manteau, et sort.)*

La Mère (à Marie). Mettez le couvert, ma petite. *(Marie quitte la grand'mère qui a fini son travail et met la table.)*

Marie (après avoir placé les cuillères et les bols, apporte un petit gobelet de vin.) Voici le vin pour mon père. *(Elle met sur la table une jolie galette.)*

Voici la galette. Qu' elle est jolie! Je vais la présenter à la dame de Noël, n'est-ce pas, mère?

La Mère. Oui, petite. Où est donc Yvonne? Il faut lui faire répéter la prière. Yvonne, Yvonne!

La Grand'mère. Est-elle sous le fauteuil?

Marie (qui la cherche partout, la trouve sous la table). Oh, voilà Yvonne.

Yvonne. Non, je ne veux pas sortir.

Marie. Yvonne ne veut pas sortir. Aidez-moi.

La Grand'mère. Petite Yvonne, si vous ne sortez pas, la dame de Noël ne mettra pas de cadeaux dans vos sabots.

Yvonne. Je sors, je sors. Je vais mettre mes sabots devant la cheminée.

Toutes les petites filles. Et moi, et moi aussi. (*Elles apportent leurs sabots et les mettent devant la cheminée.*)

Jeanne. Venez, petite Yvonne, répétez la prière. "Bûche de Noël, portez-nous bonheur." (*Yvonne répète lentement les mots après sa sœur, puis les dit tous ensemble.*)

Yvonne. J'espère que la dame de Noël viendra! (*Susette entre, un gros bouquet de gui à la main.*)

Susette. Voici le bouquet. N'est-il pas joli?

Toutes. Oui, très joli.

Susette. Où est le vase?

Louise. Voici le vase. (*On l'arrange.*)

Susette (*regardant autour de la chambre et voyant que tout est prêt*). Maintenant tout est prêt, n'est-ce pas, ma mère?

La Mère. Oui, mon enfant.

Susette. Alors, grand'mère, l'histoire.

Toutes. Oui, oui, l'histoire. (*Elles se groupent autour de la grand'mère. A ce moment la cloche de l'église sonne. Elles restent debout, la tête courbée, puis font cercle pour l'histoire.*)

La Grand'mère. Eh bien, mes enfants, mon père allait chercher la bûche comme votre père la cherche aujourd' hui. Je mettais mes sabots devant le feu comme vous. Je cherchais toujours le bouquet comme vous, Susette, et, comme vous, Marie, je faisais une galette pour la dame Noël. Elle arrive toujours avec les chanteurs. J'allumais aussi la bûche, avec un morceau de la bûche de l'année précédente.

Marie. Oh oui, je vais chercher le morceau en haut. (*Elle revient.*)
La voici.

La Grand'mère. On dit que si vous frappez les arbres, la veille de Noël, ils pousseront bien au printemps.

Toutes. Allons frapper les arbres. (*A ce moment on entend des cris.*)

Le Père. Ouvrez, ouvrez!

La Mère. Ouvrez la porte mes enfants, voilà votre père. (*On ouvre. Le père entre avec son fils. Ils traînent une grosse bûche couverte de neige.*)

Toutes. Oh père, la bûche, la bûche!

Le Père. Comme il fait froid dehors! Mais voici une grosse bûche pour Noël.

Le Frère. Il était difficile d'abattre l'arbre et de le trainer de la forêt jusqu'ici.

La Mère. Mais certainement, c'est difficile.

Le Frère. Il fait beau et chaud ici, n'est-ce pas?

Le Père. Qui peut m'aider à mettre la bûche au feu?

Tous. Moi, moi! (*Tout le monde l'aide.*)

Le Père. Restez tranquilles, mes enfants. Nous allons bénir la bûche. (*Marie lui apporte le gobelet de vin.*)

Marie. Voici le vin, mon père. (*Il le passe à la grand'mère, elle le passe à la mère, et ainsi de suite jusqu' à la petite Yvonne. Elle le prend, répète la prière et verse le vin sur la bûche.*)

Yvonne (solenellement). "Bûche de Noël, portez-nous bonheur!"

(Tout le monde chante "Maria," etc. Lorsque ce chant finit, on entend chanter dehors, "D'où viens-tu, bergère." Une stance.)

La Grand'mère. Ecoutez, voilà la Dame de Noël, je pense. N'entendez-vous pas la musique? *(Les enfants courent à la fenêtre.)*

La Mère. Oui, voilà la dame de Noël. Ouvrez la porte. *(La porte s'ouvre. La Dame de Noël entre, suivie d'une foule de paysans et paysannes —le choeur.)*

Yvonne (timidement). Oh, dame de Noël, voulez-vous mettre des cadeaux dans nos sabots? Voilà les sabots.

Marie. Voici la galette pour vous, dame de Noël.

La Dame de Noël. Bon. Je suis contente de vous, mes enfants. Maintenant chantons, et après chacun aura un morceau de gâteau.

(Tout le monde chante "D'où viens-tu, Bergère?" et "Entre le Boeuf et l'Âne gris." Puis la Dame de Noël passe le gâteau à chacun, qui en prend et le mange. Les cloches sonnent encore.)

La Dame de Noël. Voilà les cloches. Il faut aller à la messe de minuit.

La Mère. Oui, à la messe, mes enfants, à la messe. *(Tout le monde part. Le rideau tombe.)*

The words of the old chant and the verses of the two Christmas songs are given below, together with the music for one of them.

MARIA

Maria, chantons Maria.

Noël, Noël, Noël, Vierge Maria.

Mère divine de l'enfant, Maria.

ENTRE LE BOEUF ET L'ÂNE GRIS

I

Entre le boeuf et l'âne gris

Dort, dort le petit fils.

Mille anges divins,

Mille séraphims

Volent à l'entour

De ce Dieu d'amour. De ce Dieu d'amour.

II

Entre les deux bras de Marie

Dort, dort le petit fils.

Mille anges, etc.

III

Entre les roses et les lis.

Dort, dort le petit fils.

Mille anges, etc.

Entre le Boeuf et l'Âne Gris

The musical score is written for a voice and piano. It consists of four systems of music. The first system is an instrumental introduction for the piano, featuring a treble and bass staff with chords and a simple melody. The second system begins with the vocal melody. The lyrics are: "En-tre le boeuf et l' âne gris Dort Dort". The piano accompaniment continues with chords and a steady eighth-note bass line. The third system continues the vocal melody with the lyrics: "le pet-it fils. Mil-le an-ges di - vi - ns Mil-le sé - ra -". The piano accompaniment features more complex chordal textures. The fourth system concludes the piece with the lyrics: "ph - ins vol enta l'en-tour de ce Dieu d'amour De ce Dieu d'a-mour." The piano accompaniment ends with a final chordal texture.

En-tre le boeuf et l' âne gris Dort Dort

le pet-it fils. Mil-le an-ges di - vi - ns Mil-le sé - ra -

ph - ins vol enta l'en-tour de ce Dieu d'amour De ce Dieu d'a-mour.

D'OÙ VIENS-TU, BERGÈRE ?

I

D'où viens-tu, bergère,
D'où viens-tu ?
Je viens de l' étable
De m'y promener.
J'ai vu un miracle
Ce soir arrivé.

II

Qu' as-tu vu, bergère,
Qu' as-tu vu ?
J'ai vu dans la crèche
Un petit enfant
Sur la paille fraîche
Mis bien tendrement.

III

Rien de plus, bergère,
Rien de plus ?
Ya, le boeuf et l'âne
Qui sont par devant,
Avec leur haleine
Réchauffent l'enfant.

IV

Rien de plus, bergère,
Rien de plus ?
Ya, trois petits anges
Descendus du ciel
Chantant les louanges
Du Père Eternel.



A HISTORY NEWSPAPER

Upon arriving at school one morning, we found posted in the sixth-grade room a typewritten notice which read:

"The Writs of Assistance" and "Revenue Laws"

We the magistrates of England hereby agree this year of our Lord 1761 that our colonies of North America shall trade entirely with England. That no American colony shall send its tobacco, its indigo, or its rice, to France, or Holland, or any other country than England. Neither can the colonists weave cloth or make ploughshares. They may grow the wool and smelt the iron, but these must be sent to England to be made into anything.

In order to see that these laws are enforced, we now give out to the principal officer of the customs house and all officers of the English government, "The Writs of Assistance."

Signed: *Lionel Langford*, King

Parliament

Prime Minister

People

Days before, the children had chosen sides for a coming debate, colonists against George III and his party. Since the great question had been decided for us by the Revolutionary War, our decisions were to be based upon the number of arguments offered which were historically correct, properly applied, and which would not receive adequate rebuttal. Among others, James Otis, Samuel Adams, John Hancock, and Patrick Henry were to join in the debate, using, when they chose, their eighteenth-century statements, arguments, and speeches which are now a part of history.

Groups gathered about the posted notice. It was distinctly a challenge. The Tories and English delightedly slapped their knees. The colonists gravely planned to pick up the gauntlet.

Another morning we found this:

"Molasses Act"

We the magistrates of England in this year of our Lord 1733, put into effect the Molasses Act, in which you the colonists are to buy all molasses from the sugar planters in the English West Indies. If you do import molasses from the French Islands, a very heavy duty will be put on it.

Signed: *Lionel Langford*, King

Parliament

Prime Minister

People

And again:

"Stamp Act"

We the magistrates of England in the year of our Lord 1764, give to you (the colonists) a formal notice of the Stamp Act. This act only requires that legal documents and commercial instruments shall be written and newspapers printed on stamped paper. That all the people that sell the stamped paper are to be Americans.

Signed: *Lionel Langford*, King

Parliament

Prime Minister

The following month, before, during, and after our debate, an early-rising populace ranged itself before the daily bulletins in the sixth-grade room and eagerly devoured "news." As the teacher had not originated the dramatic campaign of bulletin and newspaper, nor been consulted regarding the various issues, she refrained from giving advice and but once offered a suggestion. She also once suppressed a set of cartoons and a bit of flippancy in the English organ about twentieth-century suffragettes.

Mistakes in spelling and English were corrected individually and in class. When historic inaccuracies were not detected by the

opposing group, and immediate correction was not necessary, the teacher assigned for home work the obscure point. As there was no one history textbook in use by the grade, each child owning a history chosen according to his ability to get from the printed page, there was lively interest in the presentation and discussion the following morning. "Forman says, 'thus and so'." "Let me read you how Fiske puts it in his United States History." And so on. Mace, Tappan, McMaster, Montgomery, Eggleston, Hume, Markham were discussed, compared, rejected, or accepted. Again and again a child has said, "If that's the way it was, I'll have to change my yesterday's *Gazette*," or he has been promptly invited to do so by a vigilant member of the other party.

Since some of these issues are missing, and the order in which most of them appeared forgotten, this report cannot be other than fragmentary, depending as it does largely upon reminiscence and with the inaccuracies of two or three intervening years. Instead, therefore, of trying to present them as they originally came out, colonists answering or defying the English (not the English people, be it understood, but the opposing English party), all the papers still in existence for one side will be given, and then all those for the other.

NOTICE!!!!

NOTICE !!!!!

London England May 1767

WE THE MAGISTRATES OF ENGLAND AND PARLIAMENT

PASS THIS LAW. "THAT THE PEOPLE OF THE AMERICAN COLONIES
SHALL PAY A PORT DUTY ON GLASS, PAPER, PAINT, LEAD, FRUIT
AND TEA !!!!!!!!!!!!!!!

Signed



KING



PRIME MINISTER



PARLIAMENT

FACSIMILIE OF NOTICE

The information that the representatives of the Crown were supported by the letter of the law brought forth this notice:

L A W
B E F O R E
J U S T I C E

Signed: Prime Minister

Marcia Preble, M.P.

Alma Cramer, M.P.

Margaret Keeley, M.P.

Elizabeth Greenebaum, King's Chief Adviser

Joe Pick, Sub Water-Carrier, otherwise M.P.

Lionel Langford, King

A frail, reticent, highly popular lad, represented Patrick Henry. During the debate, at the appropriate moment, Patrick Henry, with grim, fixed glare, teeth set, and upper lip lifted in determination, struck the desk before him and cried, "Then we will fight!" He surveyed his audience with deliberation and—seated himself. It was to such an extent unexpected and deliciously dramatic, that the colonists hugged themselves to keep from bursting into cheers. The humor of it all escaped no one. Next morning both papers, English and colonial, had cartoons of the grim Virginian as we had seen him the day before.



From the *Boston Herald*

COLONIST'S CARTOON OF PATRICK HENRY

Two children representing the English point of view chanced to have typewriters. We therefore find the King's documents, the *London Times* and *Spectator*, neatly typed. The colonists laboriously printed their sheets by hand, using pencil or ink, and on several hurried occasions reverted to common script.

L O N D O N T I M E S E X T R A

London, England August 1774

RESULT IN TOMORROW'S PAPER

THE DEBATE!!!!

At 9:35 o'clock gathered in the room where the debate was to be held, were eight people to represent England and twelve people to represent the colonists, and the Supreme Judge. At 9:36 the meeting was called to order. A silence which lasted about one minute ensued. Then the Prime Minister took the floor and read the following:

"In our late war with France we sent over troops to help defend the colonies and to carry on war in America. Now that the war is over and the French are driven out, the land that was formerly occupied by France is now open to the colonists. The colonists were benefited by the war, therefore, they should help to pay the debt it left behind it. The easiest way to collect the money will be to tax you.

"With part of the money we will keep a standing army in America. We will also send our governors and pay them out of the Royal Treasury."

Then followed a hot debate lasting for one hour.

Many good points were made on both sides.

DON'T FORGET TO
READ TOMORROW'S
PAPER.

(CARTOON)

PATRICK HENRY OF
VIRGINIA DELIVERING
HIS CELEBRATED
SPEECH: "Then we will
fight"

(Colonial papers please
copy.)

EXTRA!!!!!!!!!!!!

BUSINESS IS AT A
STANDSTILL
MERCHANTS COM-
PLAIN

The colonists will not buy anything from English merchants. They say, "We will not buy anything from England until she removes the tax from everything."

They are cutting off their noses to spite their faces.

LONDON TIMES - EXTRA

London, England

April 1775

BALLOTS CAST TO DECIDE
THE DEBATE

Ballots have been cast to decide the debate between the colonists and England. If all the colonists cast their vote in favor of their side, and all the English cast a vote in favor of England, the colonists will win.

The result of the debate between England and the colonists has been delayed because the committee to do the work was so tired that the judge had to call off the meeting. The colonial paper, *The Boston News*, had a picture of the Prime Minister in it. The picture was so poor that you could not tell it was a human. This is because they do not use *English-made cameras*.

EXTRA!!!!
WAR EXPECTED WITH THE
COLONIES!

In an attempt to get the ringleaders of the rebels, the King has ordered General Gage to march a detachment of the men in Boston to Concord and seize the military stores kept there. On the way they are to seize Samuel Adams and John Hancock. If this can be done, the war that is brewing may speedily be brought to a close.

His Majesty, the King, is furious and says he will stop the rebellion of the colonies, and has ordered more troops to Boston.

* * * *

REWARD!
FOR THE ARREST
OF SAMUEL ADAMS
AND JOHN HANCOCK

£50,000,000

DEAD

(Pistol)

OR

(Pistol)

ALIVE

(Skull and cross-bones)

Extra Edition.

Free.

EXTRA SPECTATOR EXTRA

EDITOR'S COMMENTS.

As this is a new newspaper. We are giving away this first and extra edition. After this the paper will come out once a week, at 2 pence an edition. As everything is new it may be a week before the paper will be perfect.

The colonists met at what they call The First Continental Congress. Here they declared that no government had the right to deprive Americans of their life, liberty or property, and asserted that the colonists had every right that an Englishman had.

E X T R A

Colonies declare themselves independent from Mother Country. General Gage is afraid to do anything. King mad with rage. More troops are going over to the colonies.

The King is going to send over more troops with the order to seize some powder that is at Concord also to capture Hancock and Adams.

E X T R A

The colonists have 15,000 troops. Don't you care we will get them yet.

Parliament.

<hr/>	
CONTINENTAL CONGRESS	
—o—	
From first page	As it is nine o'clock now, And the type is running low The editor is very large, But his brain doesn't seem to grow. So we will have to quit now And hope for a little more snow. Editor L. L. L.
Resolutions of sympathy for Massachusetts were passed. It looks as though they were really angry.	
Put your want ad's in this paper.	
2 pence	London Weekly News

* * * *

THE SPECTATOR

April 1775

<hr/>	
Editor's Comment.	DOINGS IN AMERICA
In this week's paper we are publishing all the news of the colonies as far as we can find out from our American correspondent.	Loss of our soldiers in America was very great. General Gage sent out 800 men to seize the powder that was stored at Concord; also to capture Hancock and Adams. When our soldiers reached Lexington the next morning they found fifty minute men ready to fight. Our soldiers were a little surprised, but fifty against eight hundred was rather silly. We killed eight and wounded ten.
Editor	
(Suppressed)	
<hr/>	

From first page.

Something still more surprising was that when they got to Concord, there were 400 minute men ready to fight.

Here with the minute men on the west side of the bridge, and the British on the east, in Concord town stood the two. It was a bad day for the British, for even though there were 800 to 400, our soldiers got the worst of it. Finally, as the British retreated, it was worse than the pitched battle, for minute men were firing from behind trees and houses. Our soldiers fled back to Lexington, where they found Lord Percy with 1100 men and two cannon.

Page 2

On the English side 271 were killed or wounded. Of the minute men, 49 were killed and 36 wounded, making 85 in all.

HARD KNOCKS SHOULD BE
EXPECTED IN ANY BATTLE
WORTH WHILE

The *Spectator* will save a column every week for want ad's. As this paper is seen by almost *everybody*, it would pay people to have their want ad's put in this paper. Don't wait any longer. Have them put in next week's paper.

* * * * *

I had rather a fool to be merry,
Than experience to make me sad.



HANCOCK--To the front you Lasy Farmers

NEWSPAPER CLIPPING USED AS ILLUSTRATION

The *London Times* was edited by the Prime Minister. Our King edited *The Spectator*. Where they found the names, I failed to inquire; but the colonial editor said he had at home a book from the Historical Society, and whenever in his reading he found a good name he would use it as a title for the next issue.

There was never anything but best-natured "give and take." It was no uncommon occurrence to have a child say, "I'm going to talk for the colonists a while," and later, "Now, I'm on England's side."

If the humor was sometimes flat and tasteless, we said nothing, but neither did we pretend to think it funny. Because they were endured in the original, we have printed here such lapses, normal to children of the sixth school year.

Notices and papers following, show colonial thought; as has been said before, no effort has been made to keep the order in which they were presented. Some, it would appear, were taken bodily from historical sources, several were painstakingly copied in quaint old-fashioned hand; a half dozen were decorated with skull and cross-bones. The illustrations were drawings, copied or original, and modern newspaper clippings.

TO THE COLONISTS

(Cartoon picturing Franklin's segmented snake)

U N I T E

O R

D I E

* * * *

"It is the duty of all, humbly and silently, to acquiesce in all the decisions of the Supreme Legislature. Nine hundred and ninety-nine in a thousand will never entertain a thought but of submission to our sovereign and to the authority of parliament in all possible contingencies.

James Otis."



*We, the colonists
determinedly refuse to
pay this intolerably
unjust tax on the
articles aforesaid*

*Delaware
John Hancock
Samuel Adams
Massachusetts
Connecticut*

NOTICE POSTED BY COLONISTS

* * * *

(Skull and cross-bones)

Although you charge us less for the tea than we could smuggle it in from any other country for, we refuse to have

TAXATION

without

REPRESENTATION !!!!!!!

(Signed)

Delaware

James Otis

Samuel Adams

John Hancock

Connecticut

* * * *

(Skull—representing King)

(Cross-bones—representing England)

1. By taxing the people without their consent
2. By dissolving assemblies
3. By quartering troops on the people in time of peace
4. By trying men without a jury
5. By passing the five Intolerable Acts

(Signed)

Matthew Thornton, N. H.

George Read, Delaware.

Ed. Rutledge, South Carolina.

George Walton, Georgia.

Benj. Franklin, Pennsylvania.

DECLARATION OF RIGHTS AND GRIEVANCES

- I. We Americans are subject to the British crown.
- II. That it is the natural right of a British subject to pay no taxes unless he had a voice in laying them.
- III. That the Americans were not represented in parliament.
- IV. That parliament therefore could not tax them, and that an attempt to do so was an attack on the rights of Englishmen and the liberty of self-government.

(Signed) People of Massachusetts

John Hancock

* * * *

THE DECLARATION OF RIGHTS

1. We want life, liberty, and property.
2. We want to tax ourselves.
3. To assemble peaceably to the redress of grievances.
4. To enjoy the rights of Englishmen, and all the rights granted by the colonial charters.

These rights are being *violated*.

(Signed) John Hancock

Colonists of Delaware
 Colonists of Massachusetts
 Colonists of New Jersey
 James Otis
 Samuel Adams
 Colonists of Pennsylvania

* * * *

RESOLVED

That these United Colonies are, and of a right ought to be, free and independent states, they are absolved from all allegiance to the British crown, and that all political connection between them and the State of Great Britain is and ought to be totally dissolved.

Philad., July 5, 1775.

Mr. Strahan:

You are a Member of Parliament and one of that Majority which has doomed my Country to Destruction.

You have begun to burn our towns and murder our people. Look upon your hands! They are stained with the Blood of your Relations. You and I were long friends; you are now my Enemy,—and

I am

Yours,

B. Franklin
(*flourish*)

* * * *

BOSTON NEWS EXTRA

THE FIRST SPEECH WAS MADE BY
THE PRIME MINISTER

(*Cartoon*)

Prime Minister

"In our late war with France, we sent over troops to help defend colonies," etc.

On account of the debate, all printing offices were closed.

(*Cartoon of large man representing colonists whipping small boy, representing English.*)

Patrick Henry's celebrated speech, "Then we will fight."

E X T R A

Many good points made by both sides, but is 13-5 in favor of colonists.

London Times has a picture of Patrick Henry. Thought it was funny. Said that all colonial papers should copy. Picture was like this. Pretty poor picture. Wonder who made the copy.

KEEP UP NOT BUYING FROM THE ENGLISH MERCHANTS.



THOMAS HARPER

Agent for

INLAND TRANSPORTATION

Receives at his store, No. 468 Market, above Twelfth Street, merchandise intended for Pittsburg and any of the towns on the main road leading thereto, and for all the principal towns in the southern, western, or eastern states.

John Hancock sent a letter to the *London Times* press asking what a CAMERA was. Reward five pounds for anybody who knows what it is.—*Boston Press*.

The King is furious, the *London Times* says, but the Colonists say, "Let him be. We are ready for a war."

* * * *

BOSTON NEWS EXTRA

CAMERA

A man who said his name was Cotton Mather, a farmer, came to the Press today and said that he knew what a camera was. He said that it was the horse he had. Then he demanded the five pounds. He got the five pounds. But where? Not in his pocket, BUT ON HIS BACK. And also, how could a horse draw pictures?

(Cartoon of Camera, the horse, and Cotton Mather.)

General Thomas Gage has been appointed Military Governor of Massachusetts. Alarmed at the angry state of the people, he fortified Boston Neck, the only land approach to the city of Boston.

TURN THIS
PICTURE UPSIDE
DOWN AND YOU
WILL FIND A
SAD REVERSE



* * * *

THE BOSTON NEWS

EXTRA from Pennsylvania

(Cartoon)

The Penn. Journal dropped its usual heading and in place of it put an arch with a skull and cross-bones underneath and this motto, "Expiring in the hopes of a resurrection to life again." In one corner was a coffin, and these words, "The last remains of the Penn. Journal, which departed this life the 31st of October, 1763, of a stamp in her vitals. Aged 23 years." The Penn. Gazette, on Nov. 7, the day of its first issue after the Stamp Act became law.

The Colonists caught the King.
We roasted him and toasted him,
And hit him BING.
He lay on the couch
And yelled "Ouch!"
At the Enemy's approach
The King made a face like a roach.

THE BOSTON NEWS

Jan. 29, 1776

(Cartoon)

Run away, the 23rd of this inst. January, from Silas Crispin, of Burlington, a servant man, named Joseph Morris, by trade a tailor, aged about 22 years, of middle stature, swarthy complexion, light gray eyes, his hair all off; marked with a large pit of the small-pox on one cheek near his eye. Had on when he went away a good felt hat. Reward three pounds.

To be disposed of. A likely servant man. Time four years. Who understands school teaching and reads, writes.

THE STEAMBOAT

Is now ready again to take passengers and is intended to take its trip from Arch street ferry, in Philadelphia, every Monday, Wednesday, and Friday, for Burlington, Bordontown, Bristol, and Trenton, to return on Tuesdays, Thursdays, and Saturdays.

TO BE SOLD



TWO VERY LIKELY
NEGROE BOYS, ENQUIR
OF CAPTAIN BENJAMIN CHR
ISTIAN AT HIS HOUSE IN
ARCH STREET ALSO A
QUANTITY OF VERY GOOD
LIME-JUICE TO BE SOLD
@ HEAP.

A parcel of likely negro women and girls, to be sold at Isaac Morris's alley.

THE BOSTON NEWS

WAR EXPECTED WITH ENGLAND

(Cartoon) England thinks of having war with Massachusetts and expects to win. Is mistaken.
Other colonies, mainly Virginia, will help fight if need be.

Join or die Washington says he can raise 1,000 men, and march at their head. No colony is going to stand by idly and see another colony crushed.

(Cartoon)

A call to arms. Our motto, "Be Ready."

* * * *

BOSTON GAZETTE

1775

(Cartoon)

The last remains of the *Boston News*.

(Full map of Boston, Lexington, Concord, and neighboring towns.)

MINUTE MEN

12,000 minute men are ordered to be enrolled. These minute men are men pledged to be ready for service, at a minute's notice, and lest 12,000 should not be enough, neighboring colonies will raise it to 20,000.

LOST

Five pewter spoons. Five pounds reward! At Silas Crispin.

BRITISH AND COLONISTS MAY COME TO BLOWS

A committee of correspondents is one of the means of promoting union. By this means Virginia suggested a congress of the colonies.

Pewter spoons to be sold at Paul Revere's house, across from the Liberty Pole.
Price per dozen \$3.50.

* * * *

BOSTON GAZETTE

Warren, with 1,500 men from various colonies fortified a hill, called Bunker Hill, overlooking Boston, with Putnam and Prescott. The Americans resisted two desperate assaults. Then their ammunition gave out at the third charge and had to give way. The British left a thousand dead and wounded, and the Americans lost four hundred and fifty. But among the dead was General Joseph Warren.

All of the press were at Lexington, fighting, so no papers were printed.

Green Mountain boys came together in arms when they heard about the fight at Lexington.

Even if the Green Mountain boys did come from the Green Mountains, that did not make them green.

General Gage sent soldiers to Concord to capture some supplies stored there, and on their way arrested John Hancock and Samuel Adams. Paul Revere aroused the country along the road, shouting "The regulars are out." Alarm bells were rung.

When the British troops came, they found about fifty men drawn upon the Lexington green. "Disperse, ye rebels," shouted Pitcairn. "Don't fire unless fired upon," said Captain Parker, "but if they mean to have a war, let it begin here."

The Americans stood their ground, and the firing began. Eight Americans were killed and eight wounded. The British went on and destroyed some supplies at Concord. At Concord bridge they were attacked by some Americans, and when the British fell back and started for Boston, they found the countryside alive with riflemen, who, from behind tree and house, haystack, fence, and mound, poured in a deadly fire. The British loss was 270. The Colonists, 93.

—*Reprint.*

* * * *

SPY

<p>THE SPY IS PUBLISHED WEEKLY AT NO. 6, MERCHANTS HALL C. W. ORTH EDITOR F. CORDO PRINTER TERMS TWO DOLLARS PER ANNUM, PAYABLE IN IN ADVANCE AGENTS ALLOWED EVERY SIXTH COPY</p>	<p><u>SALVATION</u> TO DATE MY BEING FROM THE OPENING YEAR, I COME A STRANGER IN THIS BUSY SPHERE.</p>  <p>FIRST KENTUCKY SETTLEMENT</p>
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Independence was decided on in the Continental Congress on July 2 and was announced July fourth. The signing took place on Aug. 2. The names of the signers will not be known for six months, or a matter as this might bring all of the men to the gallows.)

FACSIMILIE OF FIRST PAGE OF SPY

(Page Two)

ENGLISH AFRAID TO FIGHT

The king hired Hessians, which are men from Hesse-Cassel, a state in Germany, to fight against the Americans. In May, 1776, the Americans learned that 10,000 of these Hessians were coming to help subdue them. They have no principle at stake, no love of country to fight for, they come only for pay, hired by the British to fight against British flesh and blood in America. This has aroused bitter resentment among us. It has made reconciliation hopeless, and the Declaration of Independence certain.

JOHN HANCOCK'S SIGNATURE.

(Signature with flourish.)

"So big that George III can read it."

* * * *

S P YA WEEKLY PAPER

Washington says, "When I first took command of the army, I abhorred the idea of independence."

Jefferson says, "Before the 19th of April, 1775, I never heard a whisper of a disposition to separate from the mother country."

Franklin says, "The colonists did not desire independence, and they did not oppose the measures of parliament for this purpose, but as the war has now begun, it will be hard to stop."

Congress has published for the colonists a paper called "The Causes of Taking Up Arms." It is to defend our rights.

The colonists took up arms "In defence of the freedom that is our birthright, for the protection of their property and against violence actually offered. Being of one mind, we resolve to die freemen rather than to live slaves." But we still hope to be reconciled to the mother country, and to avoid the calamities of war.

POETRY

The inner side of every cloud
Is bright and shining.
I therefore turn my clouds about
And always wear them inside out
To show the lining.

Another good poem next week.

* * * *

Why the papers stopped when they did, I am unable to say. Seven or eight children had done the work voluntarily and out of school hours, the only stimulus they received being eager, omnivorous interest of their classmates. I suspect that with the advent of battles of the Revolutionary War, other dramatic forms of expression naturally took the place of the daily press, such as battles in the sand-pan, demonstrations from home-made maps of positions and engagements, and spontaneous acting of impressive situations.

This report presents but one of the many expressions which group themselves about a piece of work in history.

NOTE—In these times of terrible European conflict the question again presents itself whether it is safe or wise to teach children about battles and warfare. Without offering the arguments for or against such teaching, a single point is advanced which to me carries conviction: Children's battles are bloodless. We do not permit the imaginary stalking of wild game, the playing at Indian, the knowledge of fortress and battle in order that we may cultivate and intensify such passing interests, but rather that through expression we may aid in a normal outlet to such imagery and action. It is in the inhibition and repression of instincts that we find later menace, not in the judicious exercising of them under direction.

N. E. L.



POINTS OF CONTACT OF ENGLISH WITH SCHOOL ACTIVITIES

In a school community, how can the children's knowledge of English literature, and their skill in writing and speaking the language, be utilized so as to make the knowledge and skill more completely the real possession of the children? Or, metaphorically, how can the children's literary funds be invested in the community life of the school so as to enrich as largely as possible both the community and the individual child?

The pupil has three things to invest: knowledge of literature—of fiction, poetry, essays, of authors and literary history; a small fund of literary wealth created by his own efforts—prose narratives, descriptions, expositions, arguments, and a little verse that is occasionally poetic; ability, in varying degree, to convey his thought in language—to tell a story, to describe persons, places, and things, to argue, to express emotions: all this either by oral or by written speech.

This knowledge and skill come into play, of course, in the English classes, and more or less in all classes; but in the wider field of the community life of the school it finds useful and significant employment. We present, rather succinctly, a few of the more conspicuous means by which the pupils increase and strengthen their literary powers by making them serve the school community.

THE WEEKLY

The *Weekly* is the school newspaper. It originated in a genuine common need. At the time it was established, school news was published in the *Recorder*, the literary magazine that appeared once a month. This was an objectionable arrangement, as not only was the news stale but "valuable space" in the *Recorder* was appropriated, and the artistic unity of the magazine was impaired. The idea of a weekly news sheet was the happy thought of a high-school boy, who at once set about the work. He had a few assistants; among them they wrote copy, set type, corrected proof, ran the press, got subscriptions (one cent a copy, thirty cents a year), and acted as distributors. Occasionally in the several years of the paper's existence, special issues of four and even six pages have been printed.

At present, there is a somewhat elaborate organization, and about a score of boys and girls are engaged in the work as reporters, compositors, and pressmen.

THE FORUM

Like most high schools, we have had a *debating society*. In its most successful form it was organized into two "camps," each with its leader. Debating, however, seems to be a not altogether admirable kind of intellectual exercise, and it certainly is not the only kind that is possible in a voluntary association of pupils. Last fall it was suggested to the boys and girls who are interested in other activities than athletics, that they try to devise a plan for a more comprehensive and useful organization than a debating club. Through discussion, written and oral, there was evolved what is called the *Forum*.

The membership is divided into six groups, designated as LITERATURE, DRAMA, SCIENCE, ART, MUSIC, and DISCUSSION. Members of the club join whichever group they please. Each group has its chairman and prepares its contribution for the monthly program. As a rule, only four groups are able to be heard on any evening.

The Literature Group has contributed a number of original productions—essays, stories, poems—and readings from various authors. The Drama Group has presented several short plays, one of them the work of a member of the Group. The Science Group has performed electrical experiments, and read papers on such subjects as copper, the milk supply of Chicago, and petroleum. The Art Group has given us talks on great artists, and stereopticon views of a number of famous pictures. The Music Group has set forth the significance of the work of Edward MacDowell, Robert Schumann, and others, with vocal and instrumental illustrations. The Discussion Group has presented the two sides of such questions as the exporting of munitions of war to the belligerent nations of Europe.

A typical program is as follows:

Mendelssohn	<i>The Music Group</i>
Original Productions.....	<i>The Literature Group</i>
a. To a Blind Horse—a sonnet.	
b. Music—an essay (humorous).	
c. Why Billy Sunday Should Not Come to Chicago.	
A Single Six-year Term for the President.....	<i>The Discussion Group</i>
"The Metal Checks".....	<i>The Drama Group</i>

THE RECORDER

A school magazine is no novelty, and ours, the *Recorder*, differs little in the character of its contents from good literary periodicals of other schools. Most of the articles are written in the course of regular class work in English, where pupils are allowed free play for their ability. As a consequence, the contents are rather more varied than is usual in publications of this sort, and the articles express fairly well the real sentiments of the writers.

The management of the magazine is in the hands of a committee which is assisted by the advice of one of the teachers. The art department of the school coöperates, also, so that the *Recorder* always presents an attractive appearance.

THE MORNING EXERCISES

The daily morning exercises,* which are nearly always given by the pupils, are the means by which the more interesting phases of classroom work and other activities are presented to the rest of the school. Sometimes a whole class takes part, sometimes a smaller group; occasionally a single pupil carries through the entire exercise. Children of every grade, from the youngest to the oldest, share in this rather pleasing form of public instruction and entertainment. The subject-matter is biographical, scientific, historical, literary, dramatic, industrial, and the demand on the pupil is that he shall express his thought clearly and interestingly. For the time, he is a public speaker; he has a message and an audience. He rarely memorizes the words that are to convey his thought; usually he prepares himself carefully and trusts his utterance to the occasion. Now and then an impromptu exercise is given, and now and then there is an open "poetry exercise." A special occasion, like *May Day*, requires the coöperation of all the pupils of the school, who make honest and often effective efforts to celebrate lyrically the beauty and joy of the springtime.

As the *Recorder* furnishes a means of bringing the writer into relation to the school community, so the morning exercise constitutes a sort of platform for the speaker, while the *Forum* opens doors for both writer and speaker. How serviceable these devices are in the vitalizing of what is called English will be clear to any teacher who knows the tendency of class work to become mere recitation, and writing to take the form of "composition" exercises.

*The Morning Exercises are fully treated in Vol. II of the Year Book.

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